

Project Name: C&SF: C-111 (South Dade)
Project ID: 1300
Lead Agency: USACE / SFWMD
Authority: Flood Control Act of 1948 (modified Flood Control Act 1962, modified WRDA 1996) and the ENP Expansion Act 1989
Funding Source: Federal/State

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

Measurable Output(s): 4.75 miles total length impediments removed

Project History: Originally authorized as an addition to the C&SF Project (1948) with the Flood Control Act of 1962, the C-111 Project has been further modified by authorization of the ENP-South Dade Conveyance System (1968) and the Everglades National Park Expansion Act of 1989.

The 1996 Water Resources Development Act (WRDA 1996) required the Federal government and the Non-Federal sponsor to amend the project's cost share agreement for the C-111 project as approved and described in the Canal 111 (C-111), South Dade County, Florida, Final Integrated General Reevaluation Report and Environmental Impact Statement completed May of 1994 (1994 GRR). A supplement to the 1994 GRR was completed in 2002 and in 2004 an addendum, updating the supplement, was produced to satisfy USACE HQ concerns regarding real estate and water quality. Neither the 2002 supplemental nor the 2004 addendum have been approved.

Current Project Synopsis: This basin includes 100 square miles of agricultural lands in the Homestead/Florida City area and the entire Taylor Slough basin within Everglades National Park (ENP). The C-111 (canal) discharges into Florida Bay at its downstream terminus thru S-197. Because of extreme porosity in this area of the Biscayne Aquifer, canal water levels directly impact water levels in adjacent areas.

Modifications to the existing water management system are to restore historic freshwater flows in the Taylor Slough and are expected to help reverse the deterioration of Florida Bay. The 1994 GRR recommended creating operational capability with flexibility to provide restoration of the ecological integrity of Taylor Slough and the eastern panhandle areas of the Everglades and maintaining flood mitigation for the agricultural interests adjacent to C-111.

The project includes structural modifications: canals, levees, pump stations and replacement of bridge; as well as non-structural modifications for more natural flow and hydropatterns; and the removal of approximately 4.75 miles total length impediments. Features address the objectives of restoring historic hydrologic conditions, protection of natural values associated with the Everglades National Park, elimination of damaging freshwater flows to Manatee Bay/Barnes Sound, and to maintain flood protection for the C-111 basin east of L-31N and C-111. A hydraulic ridge will be created via a collection of features/activities limiting the amount of seepage leaving Everglades National Park (ENP) lands. A series of pump structures would provide control for this ridge by pumping directly into a retention/detention zone that is adjacent to ENP lands, and can also be utilized for temporary storage of excess flood water.

The 1994 GRR recommended five pump stations ((S-332A, S-332B, S-332C, S-332D, and S-332E), located adjacent to the L-31N levee and C-111 canals, each would have a pumping capacity of 300-cfs. The pump stations would pump water into the retention/detention zone; addressing the objective of maintaining

flood control capacity while creating the hydraulic ridge between ENP and the canal which would help restore the ecosystem within Taylor Slough. In addition, approximately 5 miles of the L-31W Canal would be backfilled, to prevent the canal from draining water out of the park, Canal 109 and Canal 110 were to be backfilled, the Taylor Slough Bridge replaced, the C-111 Spoil Mound removed, and a Spreader Canal created. Since that time S-332A has been taken out of the project.

Construction began in 1996. A land exchange of 1,000 acres between ENP and SFWMD was approved by Congress and executed 2005. A completed PMP for the C-111 (South Dade) project was revised in October 2007 and the most current update is February 2010.

Current Status:

To date the following have occurred: two interim pump stations (S-332B and S-332C) and one permanent pump station (S-332D) have been constructed, the retention/detention zone has been constructed, the Taylor Slough Bridge has been replaced, Canal 109 has been backfilled, and parts of the C-111 Spoil Mound have been removed. A Command and Control Center was also constructed for the purpose of reducing long term operations and maintenance costs.

The remaining features to be constructed include: a detention area between the retention/detention zone, which will tie the C-111 South Dade Project into the Modified Water Delivery Project, the backfill of the L-31W Canal; and permanent pump stations at 332B and 332C. The pump station 332E, the spreader canal, and the C-110 backfill have been deferred to the Comprehensive Everglades Restoration Program and are now components of the CERP: C-111 Spreader Canal - Western PIR project.

A Post Authorization Change and an Engineering Documentation Report for C-111 (South Dade) is under development and is scheduled to be transmitted in FY11 to HQ. The USACE HQ must approve this report prior to the amendment of the cost share agreement (50/50 per WRDA 1996).

Est. Cost: \$ 423,034,000

Project Schedule:

1994 Start
 2017 Finish

Detailed Project Budget Information (rounded):

| C-111 (South Dade) | Expenditures Thru FY 2009 |
|--------------------|---------------------------|
| USACE | \$113,762,000 |
| SFWMD | \$4,435,000 |
| Total | \$118,197,000 |

Hyperlink: http://www.saj.usace.army.mil/Divisions/Planning/Branches/Environmental/Projects_C111.htm

Contact: Michael Collis, Project Manager, Everglades Division, USACE
 (904) 232-1889, Michael.J.Collis@usace.army.mil

Dewey Worth, Project Manager, SFWMD
 (561) 686-8800 x3715, dworth@sfwmd.gov

Source: Project history and synopsis are summarized from the *Central and Southern Florida Project Final Integrated General Reevaluation Report and Environmental Impact Statement Canal 111 (C-111) South Dade County, Florida*. Current status summarized and the updated PMP (2010) and information provided from the project manager. Cost estimate information is updated to reflect current price levels in October 2009 dollars. Schedule is updated based on the approved *Integrated Delivery Schedule Through 2020* (as of February 2010).

Additional Information:

