Program Name: Flood Protection
Project Name: C-4 Canal Bank Improvements
Project ID: 3600
Lead Agency: South Florida Water Management District
Authority: FEMA/DCA

Strategic Plan Goal(s) Addressed: 3.B.1

Measurable Output(s): Improve conveyance and level of service protection in the C-4 Basin

Project Synopsis:

Sweetwater Flood Protection Berm & Wall: This work involves the construction of a flood protection berm along the north side of the C-4 Canal from SW 107th Avenue to SW 97th Avenue. The north bank will be raised to a minimum elevation of 8.0 feet (NGVD). This will prevent canal overflows into the city during high canal stages and allow for a pumping system constructed by the city to provide flood protection. The project area is within the C-4 Canal right-of-way from SW 97th Avenue to SW 107th Avenue.

Belen Phase 2 Flood Protection Berm & Wall: This work involves the construction of a flood protection berm and wall along the north side of the C-4 Canal from SW 130th Avenue to SW 122nd Avenue. The north bank will be raised to a minimum elevation of 8.0 feet (NGVD). This will prevent canal overflows into the adjacent communities during high canal stages and allow for a pumping system being implemented by Miami-Dade County to provide flood protection. The project area is within the C-4 Canal right-of-way from SW 130th Avenue to SW 122nd Avenue.

Palmetto Flood Protection Berm & Wall (a.k.a. Miami-Dade Floodwall): This work involves the construction of a flood protection berm and wall along the north side of the C-4 Canal from SW 97th Avenue to the Palmetto Expressway. The north bank will be raised to a minimum elevation of 8.0 feet (NGVD). This will prevent canal overflows into the adjacent communities during high canal stages and allow for a pumping system constructed by Miami-Dade County to provide flood protection. This two-mile segment was identified as having low top of bank elevations that would need to be improved for the above improvements to be utilized. This two-mile segment has been surveyed to determine the specific areas where a flood protection berm or wall will be needed. This segment of the canal was not originally included in the C-4 Flood Mitigation Plan. The Palmetto Phase was split into two (2) phases at the final design stage due to easement needs in the Phase 2 portion of the project (SW 82nd Ave to SW 87th Ave).

Quick Start Floodwall: The portion of this project between SW 94th Avenue and SW 92nd Avenue is called the “Quick Start Floodwall” component and construction of this component was completed in January 2012. This component was constructed first, because there were very few right-of-way encroachments along this portion of the canal bank and construction was therefore easily expedited.

C-4 Canal Conveyance Improvements: This work involves dredging/deepening one or more segments of the C-4 Canal. The dredging will increase the conveyance capacity of the C-4 and as a result reduce the extent of flooding along the canal banks during major storm events.

Current Status: The following projects are complete:

S-25B Forward Pump Station
S-26 Forward Pump Station
C-4 Phase 1 Impoundment (G-420 & G-421)
C-4 Phase 2 Impoundment (G-422)
Sweetwater Linear Berm and Safety Fence
Sweetwater Phase (SW 97th Ave to SW 107th Ave)
Belen Conveyance Improvements (dredging project)
Belen Phase 1 Floodwall (SW 122nd Ave. to the Florida Turnpike)
Belen Phase 2 Flood Protection Berm and Wall (SW 122nd Ave to SW 130th Ave)
Quick-Start Floodwall (SW 94th Ave. to SW 92nd Ave.)
Updated C-4 Basin Model

The following projects are scheduled to be completed in the near future:

Palmetto Flood Protection Berm
The Palmetto Phase package was split into two (2) phases. Palmetto Phase 1 includes the northerly portions of the C-4 Canal between the Palmetto Expressway & SW82nd Ave, SW 87th Ave & SW 92nd Ave, and SW 94th Ave & SW 97th Ave. Palmetto Phase 2 includes the northerly portions of the C-4 Canal between SW 82nd Ave & SW 87th Ave.

- Palmetto Phase 1 design was completed, bid, and awarded. Construction began April 2016 and will be completed by February 2018.
- Palmetto Phase 2 is anticipated to begin February 2017, pending design completion and easement strengthening.

Project Schedule:
Start Date: January 2005
Finish Date: October 2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning &amp; Design</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Actual Expenditures To-Date by SFWMD

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>$4,868</td>
<td>$32,000</td>
<td>$508,869</td>
<td>$518,772</td>
<td>$21,453</td>
<td>$3,732,715</td>
<td>$2,119,654</td>
<td>$46,261</td>
<td>$5,084,141</td>
</tr>
<tr>
<td>SFWMD</td>
<td>$24,721</td>
<td>$111,696</td>
<td>$508,869</td>
<td>$518,772</td>
<td>$21,453</td>
<td>$3,732,715</td>
<td>$2,119,654</td>
<td>$46,261</td>
<td>$5,121,009</td>
</tr>
<tr>
<td>Total</td>
<td>$29,589</td>
<td>$143,696</td>
<td>$508,869</td>
<td>$518,772</td>
<td>$21,453</td>
<td>$3,732,715</td>
<td>$2,119,654</td>
<td>$46,261</td>
<td>$5,121,009</td>
</tr>
</tbody>
</table>

* Updated as of June 20, 2016

Hyperlinks: C-4 Canal Bank Splash Sheet Facts handout
C-4 Canal Bank Poster Boards Overview
C-4 Canal Bank Improvement Projects
(SW 8th Street, between the Palmetto Expressway and SW 130th Ave in Miami-Dade County)

**Completed Projects:**
- Belen Phase 1
- Belen Phase 2
- Linear Park
- Sweetwater
- Quick-Start

**Current & Future Projects:**
- Palmetto
  - Phase 1 – Construction began April 2016
  - Phase 2 – Construction to begin Feb 2017