SFWMD Program and Project Update

South Florida Ecosystem Restoration Task Force Meeting

July 25, 2018

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Stormwater Treatment Areas (STAs)

Permitted STA Area
1994: 4,000 acres
1999: 9,000 acres
2000: 18,000 acres
2003: 35,000 acres
2004: 40,000 acres
2006: 45,000 acres
2012: 57,000 acres
STA Performance: 2008-2017

Inflow Volume (million acre-feet)

Phosphorus Concentration (ppb)

Water Year


Inflow TP

Outflow TP

Inflow Volume
Restoration Strategies: Key Projects

2012
- 57,000 ac of STA

2012-2016
- L-8 FEB (45,000 ac-ft)
- A-1 FEB (60,000 ac-ft)

2013-2018
- STA (4,300 ac)

2018-2025
- STA (1,600 ac)
- C-139 FEB (11,000 ac-ft)
- STA Earthwork (800 ac)
L-8 Flow Equalization Basin (FEB) (Eastern Flowpath)

- Designed to improve performance of STA-1E and STA-1W
- Unique geology allows for deep reservoir
- 800 acres by 58 feet deep = ~ 45,000 acre-feet of storage
- Completed June 2017
- Enables additional flow to be conveyed to L-8 FEB
- Completed April 2017
STA-1W Expansion #1 (Eastern Flowpath)

- Designed to assist STA-1W and STA-1E
- 4,300 acres of additional stormwater treatment area
- Completion of construction expected December 2018
- Environmental remediation of ~2,000 acre required to minimize potential risk of ecological impacts
STA-1W Expansion #2
(Eastern Flowpath)

- Designed to assist STA-1W and STA-1E
- 1,600 acres of additional treatment area
- Land exchange with federal government to acquire 1,327 acres completed January 2018
- Total SFWMD-owned land for project is ~2,127 acres
- Design to begin October 2018
A-1 Flow Equalization Basin
(Central Flowpath)

- Designed to improve performance of STA-2 and STA-3/4
- 15,000 acres by 4 feet deep = ~ 60,000 acre-feet of storage
- Completed July 2015
- Operational Testing and Monitoring Phase complete July 2018

Aug. 2015 – Nov. 2017

Inflow Volume
838,000 acre-feet

Inflow P Conc.
97 ppb

Outflow P Conc.
19 ppb

P Load Reduction
80%
- **Bolles East (L-16) Canal Segments 1 and 2 (~2.2 miles) and Duda Road Bridge construction complete**

- **Segment 3 (~3.2 miles) is 66% complete; completion expected February 2019; Segment 4 design ongoing; construction expected to start February 2019**

*Note: Consent Order deadlines range from October 2020 to December 2024*
Western Flowpath

- C-139 Annex FEB
  - Design activities will begin by October 2018
- STA 5/6 Earthwork
  - Pre-design site assessments for internal improvements are ongoing
- C-139 Annex Restoration (not part of Restoration Strategies)
C-43 Reservoir (Cell 1)

- 10,500 acres - 170,000 ac-ft reservoir to improve the timing, quantity and quality of freshwater flows to the Caloosahatchee River and Estuary

- State began construction in 2015
  - Package 1: Preload and Demolition – Complete
  - Package 2: Construction of S-476 (195 cfs) Pump Station substantial completion – Fall 2018
  - Package 3: S-470 Pump Station substantial completion - Spring 2022
  - Package 4: Civil Works in intermediate design

- Both Cell 1 and 2 are scheduled for substantial completion by late 2022
C-44 Reservoir/ STA

- S-404 Spillway Status:
  - Construction complete

- STA Status:
  - Construction Start: October 2014
  - Construction Finish: Spring 2019

- Pump Station Status:
  - Construction Start: April 2015
  - Construction Finish: Fall 2018
Biscayne Bay Coastal Wetlands Phase 1

- **L-31E Tidal Restoration Components - complete**
- **Deering Estate – complete**
- **L-31E:**
  - Interim Pump operations – August 2017
  - Remaining culverts - begin construction March 2018
  - 2nd interim pump under development
- **Cutler Wetlands reinitiate design update October 2019**

Interim pump installed at C-103/ L31E Canals in Homestead, FL

- 3/8/16
- 5/20/16
Project Features to Move Water South to Florida Bay

- Operate S-328
- Connect Frog Pond Detention Area to L-31W canal (G-737)
- Rebuild L-31W levee and Integral Weir
- 10 Plugs in L-31W Canal
- Remove S-327 weir
- Seal S-332D discharge basin
  - Increase pump capacity
Discussion