

Restoration Strategies Program Update

October 2017

The South Florida Water Management District's \$880 million Restoration Strategies Program includes the design and construction of a suite of regional water storage, treatment and conveyance improvement projects that will further improve water quality in America's Everglades. The program also includes a robust Science Plan consisting of research activities focused on investigating the critical factors that influence phosphorus (P) reduction and better understanding the sustainability of P removal performance at low P concentrations. The strategies also feature implementation of additional sub-regional source controls – where pollution is reduced at the source – in areas where P levels in stormwater runoff have been historically higher. Through September 2017, total program expenditures are approximately \$275 million and all projects are scheduled to be complete by December 2025.

Eastern Flowpath

L-8 Flow Equalization Basin (FEB)

Construction was completed June 21, 2017; All six outflow pumps are operational and full discharge capacity is available

Stormwater Treatment Area 1 West (STA-1W) Expansion #1

Construction is 65 percent complete; Completion expected December 2018

Stormwater Treatment Area 1 West (STA-1W) Expansion #2

A land exchange agreement with USDOJ was signed by SFWMD in July 2015; SFWMD has granted 8 time extensions to USDOJ to sign the agreement; The consent order deadline for land acquisition is March 2018

G-341 Related Conveyance Improvements

Bolles East Canal Segment 3 (~3.2 miles) construction started in May 2017 and is expected to be complete by February 2019; Design of Segment 4 is ongoing and construction is expected to start by February 2019; Planning to replace the remaining Bolles East Canal bridges is ongoing

Central Flowpath

A-1 Flow Equalization Basin (FEB)

Operational Testing and Monitoring Phase (OTMP) is ongoing and will be complete by July 2018

Western Flowpath

Design activities to begin by October 2018

Additional Components

Stormwater Treatment Area (STA) Science Plan

Nine studies are ongoing; Preliminary planning for the 2nd Five Year Work Plan (FY2019-2023) is ongoing;

Preliminary results to date are as follows:

- STA soil amendments could potentially reduce P, however costs are high and impacts to downstream systems are uncertain
- STA canals do not appear to significantly affect inflow or outflow P concentrations
- Periphyton-based STA performance appears resilient despite higher flow pulses and extended periods of high flow
- increases in P were detected in STA outflow regions, however the source of increase continues to be studied
- deficiencies and biases were determined for existing P sampling methods; other validation activities will continue

Sub-Regional Source Controls

A canal cleaning demonstration project identified particulate P as being lower after canal cleaning, however more information is necessary to understand long-term benefits; A water quality data and historical documentation summary was completed in April 2017; The development of sub-regional source control concepts began and will serve to initiate discussions with stakeholders

Mecca Impoundment

Currently being evaluated as part of CERP's Loxahatchee River Watershed Restoration Project

www.sfwmd.gov/restorationstrategies

Restoration Strategies Program Update October 2017

Consent Order¹ Milestones
(with deadlines or completion dates ranging from November 2016 through October 2018)

| Project: Activity | Deadline | Date Completed | Days +/- ² |
|---|------------|----------------|-----------------------|
| Eastern Flowpath | | | |
| L-8 FEB: Complete Construction | 12/31/2016 | 6/21/2017 | -172 |
| STA-1W Expansion #1: Construction Status Report | 3/1/2017 | 2/21/2017 | +8 |
| STA-1W Expansion #1: Construction Status Report | 3/1/2018 | | |
| STA-1W Expansion #2: Complete Land Acquisition | 3/31/2018 | | |
| STA-1W Expansion #2: Initiate Design | 10/1/2018 | | |
| L-8 Divide Structure: Complete Construction | 9/30/2018 | 7/7/2016 | +815 |
| S-375 Expansion: Complete Construction | 12/31/2018 | 4/3/2017 | +637 |
| Central Flowpath | | | |
| A-1 FEB: Operational Monitoring and Testing Period Complete | 7/29/2018 | | |
| Western Flowpath | | | |
| C-139 FEB: Initiate Design | 10/31/2018 | | |

1: FDEP Consent Order 12-1148 (associated with National Pollutant Discharge Elimination System Permit No. FL0778451-001-FL7A/RA) and FDEP Consent Order 12-1149 (associated with Everglades Forever Act Permit No. 0311207)

2: + = days ahead; - = days behind

Photo of the Month



L-8 FEB and STA-1E after Hurricane Irma, Palm Beach County (looking north) – September 15, 2017