

Restoration Strategies Program Update

July 2018

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 May 2018, total program expenditures are approximately \$295 million and all projects are scheduled to be complete by December 2025.

Eastern Flowpath

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

Construction is 81 percent complete; Completion expected December 2018

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

Design activities will begin by October 2018

G-341 Related Conveyance Improvements

Bolles East Canal Segment 3 (~3.2 miles) construction is 66 percent complete and expected to be complete by February 2019; Design of Segment 4 is ongoing and construction is expected to start by February 2019; Discussions with owners of the remaining Bolles East Canal bridges have been productive and have resulted in preliminary agreements regarding their replacement

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

Pre-design site assessments (e.g. survey) for STA-5/6 Internal Improvements are ongoing; Design activities for the C-139 FEB will begin by October 2018

Additional Components

Stormwater Treatment Area (STA) Science Plan

Of the nine initial studies, three have been completed, others are nearing completion and two new studies have been initiated; 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
- Periphyton-based STA performance appears resilient despite higher flow pulses and extended periods of high flow
- STA canals do not appear to significantly affect inflow or outflow P concentrations
- 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

Development of sub-regional source control concepts and coordination with stakeholders is ongoing

Mecca Impoundment

Currently being evaluated as part of CERP's Loxahatchee River Watershed Restoration Project; approval of the tentatively selected plan by the U.S. Army Corps of Engineers expected July 31, 2018

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Consent Order¹ Milestones
(with deadlines or completion dates ranging from August 2017 through July 2019)

| Project: Activity | Deadline | Date Completed | Days +/- ² |
|---|------------|----------------|-----------------------|
| Eastern Flowpath | | | |
| STA-1W Expansion #1: Construction Status Report | 3/1/2018 | 2/23/2018 | +6 |
| STA-1W Expansion #1: Complete Construction | 12/31/2018 | | |
| STA-1W Expansion #2: Complete Land Acquisition | 3/31/2018 | 1/31/2018 | +59 |
| 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



Science Plan – scientists evaluating soil characteristics in STAs with floating aquatic vegetation

www.sfwmd.gov/restorationstrategies