# Restoration Strategies Program Update December 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 November 2017, total program expenditures are approximately \$279 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

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

Construction is 67 percent complete; Completion expected December 2018

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

A land exchange agreement to acquire 1,327 acres from USFWS was conditionally approved by the Governing Board in November 2017; Design expected to start in 2018

#### **G-341 Related Conveyance Improvements**

Bolles East Canal Segment 3 (~3.2 miles) construction is 12 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; 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 2<sup>nd</sup> 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**

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

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## Consent Order<sup>1</sup> Milestones (with deadlines or completion dates ranging from January 2017 through December 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		

<sup>1:</sup> 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)

### **Photo of the Month**



STA-1W Expansion #1 Structure G-728, Palm Beach County - October 2017

www.sfwmd.gov/restorationstrategies

<sup>2: + =</sup> days ahead; - = days behind