

Restoration Strategies Program Update

January 2019

The South Florida Water Management District's (SFWMD) \$880 million Restoration Strategies Program includes the design and construction of a suite of regional water storage, treatment and conveyance improvement projects that will enhance 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 December 2018, total program expenditures are approximately \$313 million, and all projects are scheduled to be complete by December 2025.

Eastern Flowpath

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

Construction of the new STA 1W Expansion #1 was substantially completed in December 2018 and the consent order deadline met.

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

Initial screening of six design alternatives delivered November 2018.
State and Federal permit application expected in July 2019.

G-341 Related Conveyance Improvements

Bolles East Canal Segment 3 (~3.2 miles) construction is 97 percent complete.
Segment 4 final design details under review.

Western Flowpath

STA-5/6 Internal Improvements

Site construction is currently underway with internal resources. Clearing, grubbing, and burning underway in preparation for excavation operations. Permit for stockpile of material in C-139 FEB site obtained December 2018.

C-139 Flow Equalization Basin (FEB)

Design kick off held in December 2018. Geotechnical and survey field work initiated.
Geotechnical data report due in April 2019.

Additional Components

Sub-Regional Source Controls

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

C-18 West Impoundment (Replacement Feature/Mecca)

Design Statement of Work is under development.

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Stormwater Treatment Area (STA) Science Plan

There are currently twelve Science Plan Studies. Of these twelve studies, five have been completed, two are nearing completion and five are in-progress.

Operational Guidance for FEB and STA Regional Operation	Completed in 2017
Influence of canal Conveyance on P Concentrations.....	Completed in 2017
Evaluation of Sampling Methods for TP.....	Completed in 2017
Periphyton-Based STA Performance, Design and Operational Factors	Completed in 2018
Evaluation Rooted Floating Aquatic Vegetation in STAs.....	Completed in 2018
P Forms, Flux and Transformation Processes	Nearing Completion
STA Water and P Budget Treatment Performance Improvements	Nearing Completion
Vegetation Inundation Depth and Duration Sustainability.....	In-Progress
Soil Amendments to Control P Flux	In-Progress
Factors for Formation of Floating Tussocks in STAs.....	In-Progress
Effects of Faunal Species on P Cycling in STAs	In-Progress
Improving Resilience of Sub-Aquatic Vegetation in STAs	In-Progress

Consent Order¹ Milestones

Project: Activity	Deadline	Date Completed
Eastern Flowpath		
STA-1W Expansion #1: Construction Status Report	3/1/2018	2/23/2018
STA-1W Expansion #1: Complete Construction	12/31/2018	12/26/2018
STA -1W Expansion #1: Initial Flooding and Optimization	12/31/2020	
STA-1W Expansion #2: Complete Land Acquisition	3/31/2018	1/31/2018
STA-1W Expansion #2: Initiate Design	10/1/2018	9/25/18
STA-1W Expansion #2: State and Federal Permit Applications	8/1/2019	
G-341 Related Conveyance Improvements: Initiate Construction	11/30/2022	8/13/2015
G-341 Related Conveyance Improvements: Complete Construction	12/31/2024	
Central Flowpath		
A-1 FEB: Operational Monitoring and Testing Period Complete	7/29/2018	7/29/2018
Western Flowpath		
C-139 FEB: Initiate Design	10/31/2018	8/22/18
C-139 FEB: Submit State and Federal Permit Applications	8/30/2019	
STA-5/6 Internal Improvements: Initiate Design	10/31/2019	9/10/2018
STA-5/6 Internal Improvements: Submit Permit Applications	8/30/2020	8/14/18
STA-5/6 Internal Improvements: Complete Design	10/31/2021	9/24/18
STA-5/6 Internal Improvements: Initiate Construction	1/31/2022	9/25/18
STA-5/6 Internal Improvements: Construction Status Report	3/1/2023	

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)

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STA-1W Expansion No. 1: Final earthwork (levee grading) of north segment in Cell 6.