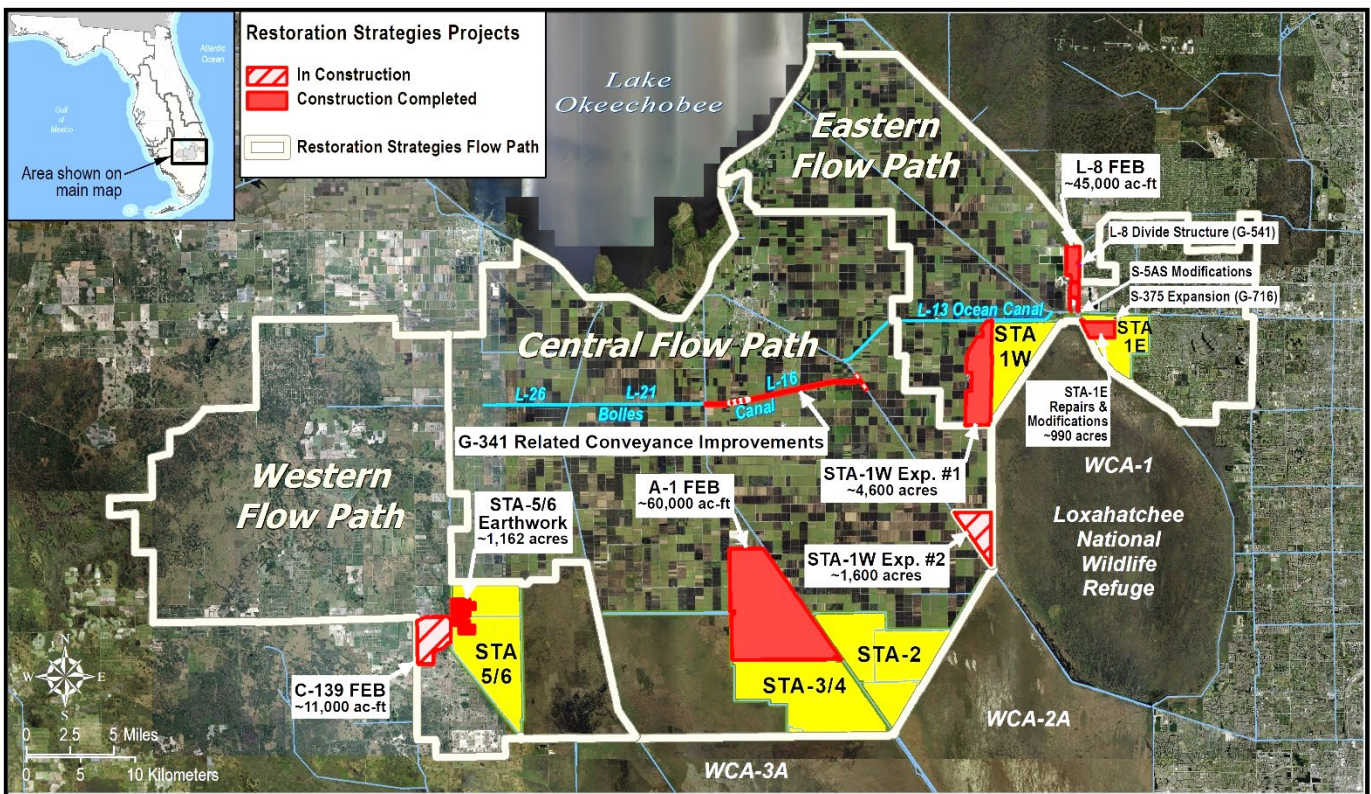


Restoration Strategies Program and Stormwater Treatment Area Enhancement Update August 2022

The South Florida Water Management District's (District) \$880 million Restoration Strategies Program will improve water quality flowing into America's Everglades by implementing a suite of flow equalization basins (FEB's), stormwater treatment area (STA) expansions, and conveyance improvement projects over a 13-year timeline. The program includes a robust Science Plan focused on investigating the critical factors that influence phosphorus reduction and a better understanding of improving treatment performance at low phosphorus concentrations. A third part of the program is investigation of additional sub-regional source controls – where pollution is reduced at the source – in areas where phosphorus levels in stormwater runoff have been historically higher.

In 2012, FDEP issued watershed National Pollutant Discharge Elimination System (NPDES) and Everglades Forever Act (EFA) permits to the District to continue to operate its STAs. At the same time, Consent Orders were issued with these permits that require the District to construct 13 projects on an aggressive timeline to be completed by December 2025 with specific milestone due dates for each project activity. The existing Everglades STAs, an essential component of Restoration Strategies, are unique constructed treatment wetlands designed to improve the quality of water flowing into the Everglades. Upon completion of all Restoration Strategies projects, the permits require each STA to meet the Water Quality Based Effluent Limit (WQBEL), to ensure that the State's water quality standard for the Everglades is achieved.

In addition to the Restoration Strategies projects, the District is enhancing the performance of the existing Everglades STAs through a series of construction projects to refurbish, rehabilitate, and renew large portions of the existing facilities, some of which have been in operation for the last 20 years.



Restoration Strategies Flow Paths and Projects

Restoration Strategies Program and Stormwater Treatment Area Enhancement Update August 2022

Eastern Flow Path

STA-1W Expansion #2

Construction of Civil Works and Inflow Pump Stations is ongoing. Formwork and reinforcing steel installation for the bay walls for G781 and G782 is ongoing.

G-341 Related Conveyance Improvements

Contractors have mobilized on to the project site. Segment 5 construction is now ongoing.

STA-1W Refurbishment

All refurbishment construction is complete and as built documents accepted. Vegetation management activities are ongoing in newly graded areas. Replacement of structures between Cells 1B and 3 will occur in 2023.

Central Flow Path

STA-2 Refurbishment

Earthwork to raise a 530-acre low-lying area in northwest Cell 2 to design elevation is ongoing, 365 acres have been raised, and approximately 165 acres remain.

Western Flow Path

STA-5/6 Internal Improvements

Cells 2A and 3A are currently in the initial flooding and optimization period.

C-139 Flow Equalization Basin (FEB)

Construction activity for the G-550 inflow pump station, G-551 outflow structure, and G711E divide structure are ongoing. ERP Permits for G-552 are complete. Levee and canal construction and land-levelling are ongoing.

Connection of STA-5/6 to Lake Okeechobee

Phase 1 design to improve conveyance, build a pump station, and rely on temporary facilities to connect the Miami Canal to the inflow of STA-5/6 is ongoing. Embankment/Canal Design analysis is ongoing.

Design of G-775 interim pump station is ongoing.

Restoration Strategies Program and Stormwater Treatment Area Enhancement Update August 2022

Restoration Strategies Science Plan

Nine Science Plan studies have been completed and twelve studies are ongoing.

<u>Ongoing Science Plan Studies</u>	<u>Completion By</u>
Soil Management Study	Sept 2022
L-8 FEB and STA Operational Guidance	Sept 2022
Improving Resilience of Submerged Aquatic Vegetation in STAs	Sept 2022
Biomarker Study	Sept 2022
Ecotopes Study	Sept 2022
P Dynamics Study	Sept 2023
Landscape Study.....	Sept 2023
Effects of Faunal Species on P Cycling in STAs.....	Sept 2023
Periphyton and Phytoplankton P Uptake and Release.....	Sept 2023
Advection Study.....	Sept 2024
Data Integration Study	Sept 2024
Marl Study	Sept 2024

PICTURE OF THE MONTH



Area Location within Site

C-139 FEB perimeter levee construction.

Restoration Strategies Program and Stormwater Treatment Area Enhancement Update August 2022

EASTERN FLOW PATH			CENTRAL FLOW PATH						
STA-1W Expansion #2 (100864)			G-341 Related Conveyance Improvements (100802)			STA-2 Expansion: Compartment B			
Activity	Deadline		Activity	Deadline		Activity	Deadline		
Complete land acquisition	3/31/2018	✓	Initiate design	10/1/2020	✓	Initial flooding and optimization period complete	5/31/2014	✓	
Initiate design	10/1/2018	✓	Submit state and federal permit applications	8/1/2021	✓	COMPLETE			
Submit state and federal permit applications	8/1/2019	✓	Complete land acquisition (if required)	9/30/2021	✓	A-1 FEB (100706)			
Complete design	7/31/2020	✓	Complete design	7/31/2022	✓	Activity	Deadline		
Initiate construction	11/30/2020	✓	Initiate construction	11/30/2022	✓	Initiate design	4/1/2012	✓	
Construction status report	3/1/2021	✓	Construction status report	3/1/2023	✓	Submit state and federal permit applications	12/1/2012	✓	
Construction status report	3/1/2022	✓	Construction status report	3/1/2024		Design status report	3/1/2013	✓	
Complete construction	12/31/2022		Complete construction	12/31/2024		Complete design	8/1/2013	✓	
Initial flooding and optimization period complete	12/31/2024		L-8 Divide Structure (100817)			Initiate construction	6/30/2014	✓	
STA-1W Expansion #1 (100818)			Activity	Deadline		Construction status report	3/1/2015	✓	
Complete land acquisition	9/30/2013	✓	Initiate design	10/1/2012	✓	Construction status report	3/1/2016	✓	
Initiate design	9/30/2013	✓	Complete design	9/30/2014	✓	Complete construction	7/30/2016	✓	
Submit state and federal permit applications	7/30/2014	✓	Initiate construction	10/1/2016	✓	Operational monitoring and testing period complete	7/29/2018	✓	
Complete design	7/30/2015	✓	Complete construction	9/30/2018	✓	WESTERN FLOW PATH			
Initiate construction	1/31/2016	✓	S-5AS Modifications (100822)			STA-5/6 Internal Improvements (100868)			
Construction status report	3/1/2017	✓	Activity	Deadline		Activity	Deadline		
Construction status report	3/1/2018	✓	Initiate design	10/1/2012	✓	Initiate design	10/31/2019	✓	
Complete construction	12/31/2018	✓	Complete design	9/30/2014	✓	Submit state and federal permit applications	8/30/2020	✓	
Initial flooding and optimization period complete	12/31/2020	✓	Initiate construction	10/1/2014	✓	Complete design	10/31/2021	✓	
STA-1E Repairs and Modifications			Complete construction	9/30/2016	✓	Initiate construction	1/31/2022	✓	
Activity	Deadline		S-375 Expansion (100819)			Construction status report	3/1/2023	✓	
PSTA Decommissioning complete	12/31/2022	✓	Activity	Deadline		Construction status report	3/1/2024	✓	
Culvert repairs complete	12/31/2022	✓	Initiate design	9/30/2013	✓	Complete construction	12/31/2024	✓	
Cell 5 and 7 improvements complete	12/31/2022	✓	Complete design	7/30/2015	✓	Initial flooding and optimization period complete	12/31/2025	✓	
L-8 FEB (100813)			Initiate construction	1/31/2016	✓	STA-5/6 Expansion: Compartment C			
Activity	Deadline		Complete construction	12/31/2018	✓	Activity	Deadline		
Submit state and federal permit applications	1/31/2014	✓	LEGEND			Initial flooding and optimization period complete	5/31/2014	✓	
Construction status report	3/1/2014	✓	Flow Equalization Basin					C-139 FEB (100867)	
Construction status report	3/1/2015	✓	Stormwater Treatment Area					Activity	Deadline
Complete construction (begin multi-purpose ops)	12/31/2016	✓	Conveyance Improvement					Initiate design	10/31/2018
Long term operations commence	12/31/2022		Complete					Submit state and federal permit applications	8/30/2019
						Complete design	10/31/2020	✓	
						Initiate construction	1/31/2021	✓	
						Construction status report	3/1/2021	✓	
						Construction status report	3/1/2022	✓	
						Construction status report	3/1/2023		
						Complete construction	12/31/2023		
						Operational monitoring and testing period complete	12/31/2024		

Projects Complete = 8 of 13
Activities Complete = 65 of 74
% Activities Complete = 88 %
% Time Complete = 74 %

Revised June 15, 2022