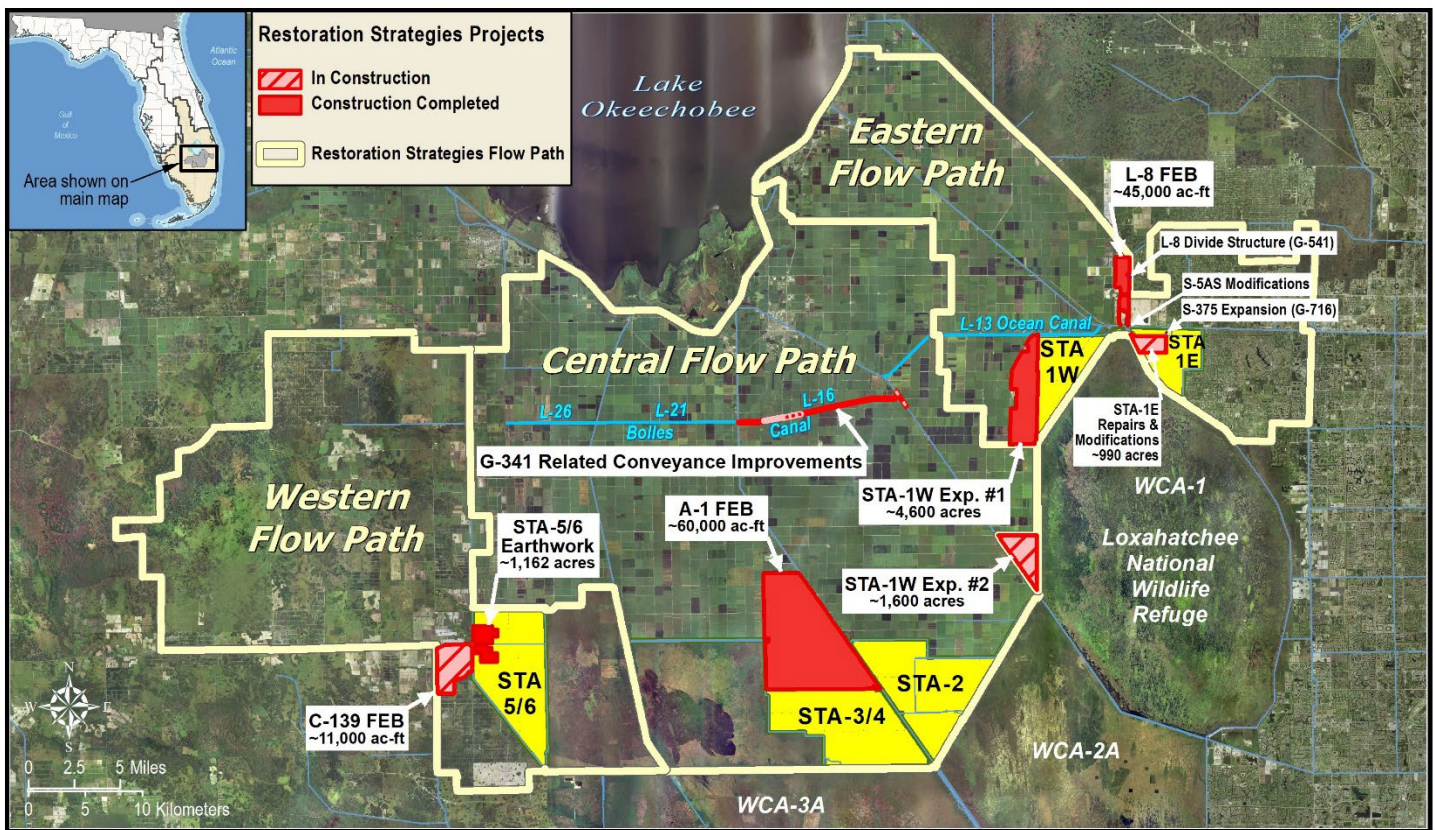


Restoration Strategies Program and Stormwater Treatment Area Enhancement Update March 2022

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 March 2022

Eastern Flow Path

STA-1E Repairs and Modifications (Cells 5 and 7)

Earthwork to correct topographic deficiencies of the original construction in Cells 5 and 7 is complete. Vegetation management planting activities is complete in Cell 5 and ongoing in Cell 7.

STA-1W Expansion #2

Construction of Civil Works and Inflow Pump Station is ongoing. Formwork and reinforcing steel installation for the lower walls and columns of G-780 and G-781 pump stations is ongoing. Sheet pile installation for G-782 pump station is complete. Blasting for Collection Canal is complete. Construction Status Milestone Compliance Report (MCR) was completed in February

G-341 Related Conveyance Improvements

Construction of Segment 4 is complete and as-built surveys are being prepared. Segment 5 final design was completed and advertised in February 2022.

STA-1W Refurbishment

Earthwork for various enhancements is ongoing. The removal of the levee and structures between Cells 2B and 4 is complete. Removal of finger canals and regrade of 50 acres in Cell 3 are complete. Planting of vegetation and removal of the dewatering berm are ongoing. The realignment of the levee between Cells 5B and 2A is nearly complete. Substantial completion of all STA-1W refurbishments is expected in March 2022. Replacement of structures between Cells 1B and 3 will be addressed in 2023.

Central Flow Path

STA-2 Refurbishment

Earthwork to regrade uneven topography in the northern portion of Cell 2 is ongoing. The earthwork involves lowering an area in northeast Cell 2 and raising a 500-acre low-lying area in northwest Cell 2. The eastern regrade area is complete. Earthwork to make 49 cuts through remnant farm berms in Cell 3 is complete.

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 and G-551 outflow structure is ongoing. ERP Permits for G-552 and G-711E complete. Construction Status Milestone Compliance Report completed in February.

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.

Restoration Strategies Program and Stormwater Treatment Area Enhancement Update March 2022

Restoration Strategies Science Plan

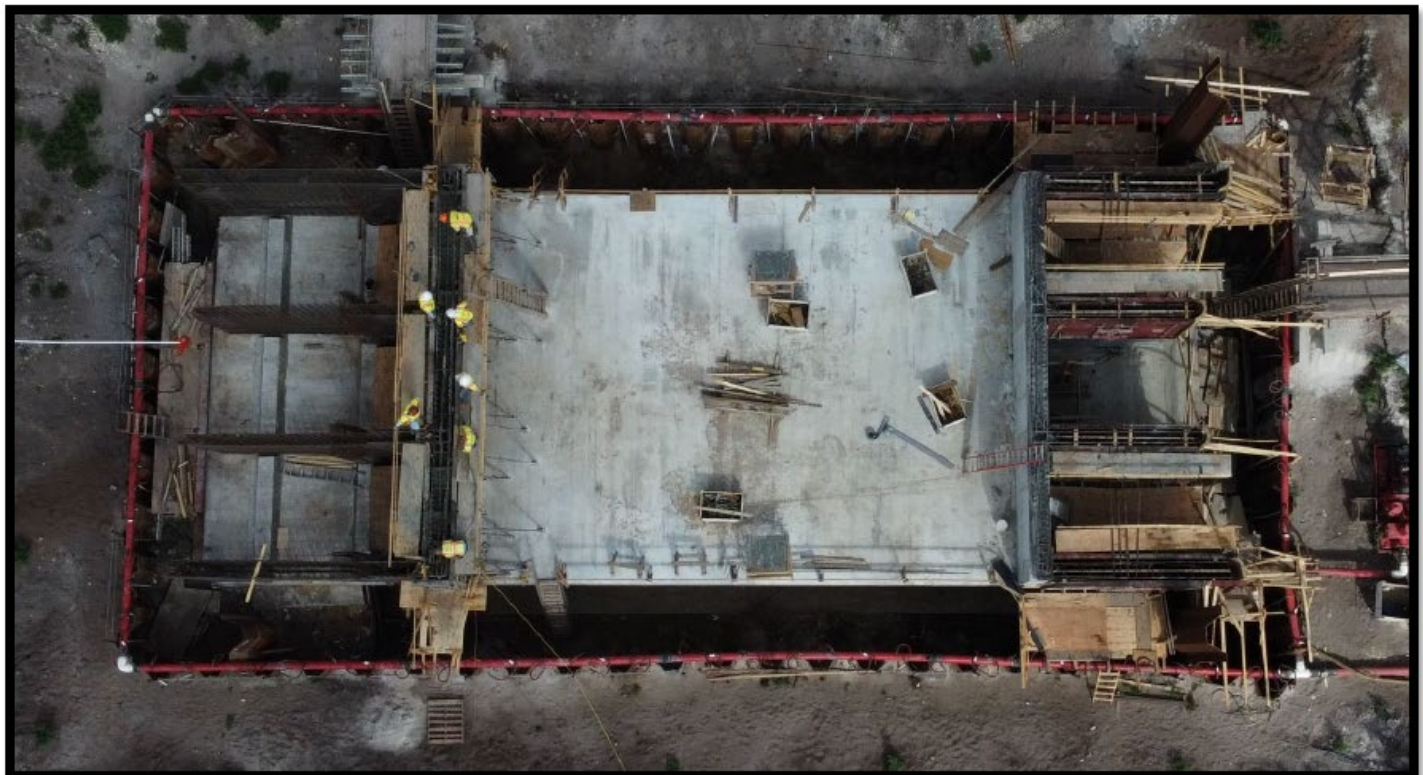
Of the fourteen Science Plan studies, eight have been completed and six are in progress. Eight additional study proposals have been approved.

Ongoing Science Plan Studies

	<u>Completion By</u>
Factors for Formation of Floating Tussocks in STAs.....	Sept 2022
L-8 FEB and STA Operational Guidance.....	Sept 2022
Improving Resilience of Submerged Aquatic Vegetation in STAs	Sept 2022
Effects of Faunal Species on P Cycling in STAs	Sept 2023
Periphyton and Phytoplankton P Uptake and Release	Sept 2023
Soil Amendments to Control P Flux.....	Sept 2023

Additional Studies

Biomarker Study.....	Sept 2022
Fauna study	Sept 2023
Ecotopes Study	Sept 2022
P Dynamics Study	Sept 2023
Advection Study	Sept 2023
Landscape Study.....	Sept 2023
Data Integration Study	Sept 2024
Marl Study	Sept 2024



C-139 FEB Inflow Structure G-551 under construction. Image depicts preparation for concrete pour.

Restoration Strategies Program and Stormwater Treatment Area Enhancement Update March 2022

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

Projects Complete = 7 of 13
 Activities Complete = 63 of 74
 % Activities Complete = 85 %
 % Time Complete = 71 %

Revised February 28, 2022