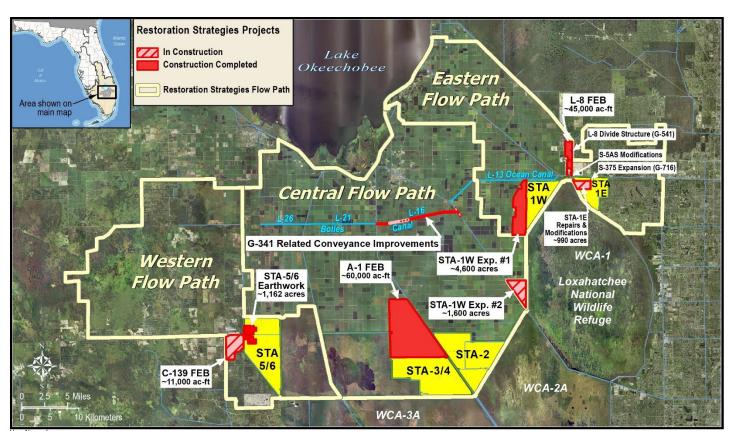
The South Florida Water Management District's (District) \$880 million Restoration Strategies Program will improve water quality flowing into America's Everglades by implementing a suite of flow equalization basins (FEB's), stormwater treatment area (STA) expansions, and conveyance improvement projects 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, rehabiliate, 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

Eastern Flow Path

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

Earthwork to regrade Cells 5 to correct topographic deficiencies of the original construction is complete. Vegetation management planting activities are ongoing. Cell 7 regrade is ongoing. Project is on schedule to be completed by April 2022.

STA-1W Expansion #2

Construction of Civil Works and Inflow Pump Station is ongoing.

G-341 Related Conveyance Improvements

Segment 4 construction is ongoing; concrete work for the Boca Chica bridge deck is complete. Construction is expected to be completed by November 2021. Segment 5 design is ongoing and is expected to be finalized by November 2021.

STA-1W Refurbishment

Earthwork for various enhancements is ongoing. Work includes 50-acre regrade in Cell 3 to remove finger canals, levee realignment between Cells 5B and 2A for improved flow patterns, removal of levees and structures between Cells 2B and 4, and replacement of structures between Cells 1B and 3. The 2B /4 levee removal and the Cell 3 earthwork is complete. The levee removal between 5B and 2A levee is near completion

Central Flow Path

STA-2 Refurbishment

Earthwork to regrade a 500-acre low-lying area, repair plugs in borrow canal, and other enhancements in Cell 2 is ongoing.

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 G550 Inflow pump station and G-551 structures are ongoing. ERP Permits for G552 and G711E complete.

Connection of STA-5/6 to Lake Okeechobee

Hydraulic Feasibility Study and Conceptual Design have been completed. Phase 1 design will commence in October 2021 to improve conveyance, build a pump station, and rely on temporary facilities to connect the Miami Canal to the inflow of STA-5/6.

Restoration Strategies Science Plan

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

Ongoing Science Plan Studies	Completion By
Factors for Formation of Floating Tussocks in STAs	Sept 2021
L-8 FEB and STA Operational Guidance	Sept 2021
Improving Resilience of Submerged Aquatic Vegetation in STAs	Sept 2022
Effects of Faunal Species on P Cycling in STAs	Sept 2022
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 2023
P Dynamics Study	Sept 2023
Data Integration Study	Sept 2024
Marl Study	Sept 2024



Westward aerial view of the STA-1W Expansion #2 Project. Image shows construction of G-781 Inflow Pump Station and G-784 Inflow Culvert in Cell 9.

EASTERN FLOW PATH				CENTRAL 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 COMPLETE	Deadline	
Complete land acquisition	3/31/2018	1	Initiate design	10/1/2020	✓	Initial flooding and optimization period complete		1
Initiate design	10/1/2018	1	Submit state and federal permit applications	8/1/2021	✓			
Submit state and federal permit applications	8/1/2019	1	Complete land acquisition (if required)	9/30/2021	✓	A-1 FEB (100706)		
Complete design	7/31/2020	1	Complete design	7/31/2022		Activity	Deadline	
Initiate construction	11/30/2020	1	Initiate construction	11/30/2022	✓	Initiate design	4/1/2012	1
Construction status report	3/1/2021	1	Construction status report	3/1/2023	✓	Submit state and federal permit applications	12/1/2012	1
Construction status report	3/1/2022		Construction status report	3/1/2024		Design status report	3/1/2013	1
Complete construction	12/31/2022		Complete construction	12/31/2024		Complete design	8/1/2013	1
Initial flooding and optimization period complete	12/31/2024					Initiate construction COMPLETE	6/30/2014	1
			L-8 Divide Structure (100817)			Construction status report	3/1/2015	1
STA-1W Expansion #1 (100818)			Activity	Deadline		Construction status report	3/1/2016	1
Activity	Deadline			10/1/2012	✓	Complete construction	7/30/2016	1
Complete land acquisition	9/30/2013	1	Initiate design Complete design Complete design	9/30/2014	✓	Operational monitoring and testing period complete	7/29/2018	1
Initiate design	9/30/2013	1	Initiate construction	10/1/2016	✓			
Submit state and federal permit applications	7/30/2014	1	Complete construction	9/30/2018	1	WESTERN FLOW PATH		
	7/30/2015	1		-,,		STA-5/6 Internal Improvements (100868	8)	
Initiate construction COMPLETE	1/31/2016	✓	S-5AS Modifications (100822)			Activity 200000	Deadline	
Construction status report	3/1/2017	√	Activity (100822)	Deadline		Initiate design	10/31/2019	1
· · · · · · · · · · · · · · · · · · ·	3/1/2017	√	Initiate design	10/1/2012	1	Submit state and federal permit applications	8/30/2020	1
Construction status report Complete construction	12/31/2018	√	Complete design COMPLETE	9/30/2014	·	Complete design	10/31/2021	1
Initial flooding and optimization period complete	12/31/2018	1	Initiate construction	10/1/2014	,	Initiate construction	1/31/2022	1
illitial flooding and optimization period complete	12/31/2020	•	Complete construction		·	Construction status report	3/1/2023	1
STA-1E Repairs and Modifications			Complete construction	9/30/2016	•	Construction status report	3/1/2023	1
•	Deadline		S-375 Expansion (100819)			Complete construction	12/31/2024	1
Activity		1		December 2				Y
PSTA Decommissioning complete	12/31/2022	√	Activity	Deadline	1	Initial flooding and optimization period complete	12/31/2025	ı,
Culvert repairs complete	12/31/2022	٧	Initiate design Complete design Complete design	9/30/2013	v	STA F/G Expansions Compartment C		
Cell 5 and 7 improvements complete	12/31/2022			7/30/2015		STA-5/6 Expansion: Compartment C	December 2	
L 0 FFD (400042)			Initiate construction	1/31/2016	√	Activity COMPLETE	Deadline	,
L-8 FEB (100813)	- III		Complete construction	12/31/2018	_	Initial flooding and optimization period complete	5/31/2014	✓
Activity	Deadline	,				C 420 FED (4000CT)		
Submit state and federal permit applications	1/31/2014	√	LEGEND			C-139 FEB (100867)	December 1	
Construction status report	3/1/2014	√	Flow Equalization Basin			Activity	Deadline	
Construction status report	3/1/2015	1	Stormwater Treatment Area			Initiate design	10/31/2018	1
Complete construction (begin multi-purpose ops)	12/31/2016	✓	Conveyance Improvement			Submit state and federal permit applications	8/30/2019	Y
Long term operations commence	12/31/2022		✓ Complete			Complete design	10/31/2020	1
n	ianta Camunis to	7 -5	12			Initiate construction	1/31/2021	√
Projects Complete = 7 of 13			Construction status report	3/1/2021	٧			
Activities Complete = 61 of 74			Construction status report	3/1/2022				
% Activities Complete = 82 %			Construction status report	3/1/2023				
%	Time Complete =	68 %				Complete construction	12/31/2023	
						Operational monitoring and testing period complete	12/31/2024	