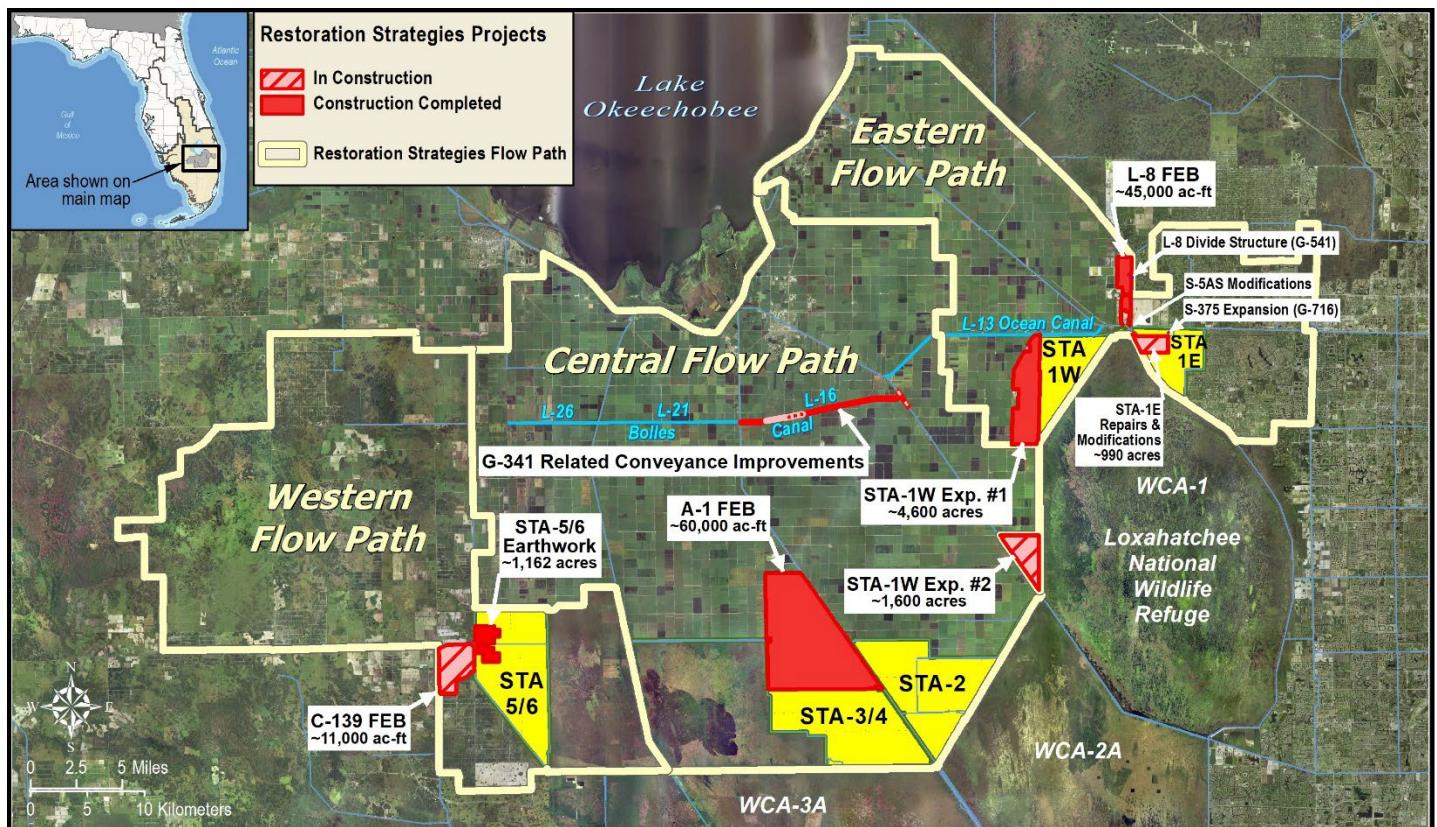


Restoration Strategies Program and Stormwater Treatment Area Enhancement Update June 2022

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 June 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 lower walls and columns of inflow pump stations is ongoing.

G-341 Related Conveyance Improvements

Notice to Proceed for construction of Segment 5 issued May 2022.

STA-1W Refurbishment

Refurbishment construction is complete and as built documents are in review. Vegetation management activities are ongoing in newly graded areas. The realignment of the levee between Cells 5B and 2A is complete and as-built surveys are in review.

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, 350 acres have been raised, and approximately 180 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 and G-551 outflow structure is ongoing. ERP Permits for G-552 are complete. G-711E temporary sheet pile activity is ongoing. 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. Geotechnical field work and soil testing is complete. Engineering analysis is ongoing. Design of G-774 interim pump station is ongoing.

Restoration Strategies Program and Stormwater Treatment Area Enhancement Update June 2022

Restoration Strategies Science Plan

Eight Science Plan studies have been completed and thirteen studies are ongoing.

<u>Ongoing Science Plan Studies</u>	<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
Biomarker Study.....	Sept 2022
Ecotopes Study	Sept 2022
P Dynamics Study	Sept 2023
Advection 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
Fauna study	Sept 2023
Data Integration Study	Sept 2024
Marl Study	Sept 2024



Landscape study. STA-1W south Test Cell 13. Installation of two 80-foot flumes .

