

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Lainhart Dam on
Loxahatchee River

Loxahatchee River Watershed Restoration Project (LRWRP) Project Overview

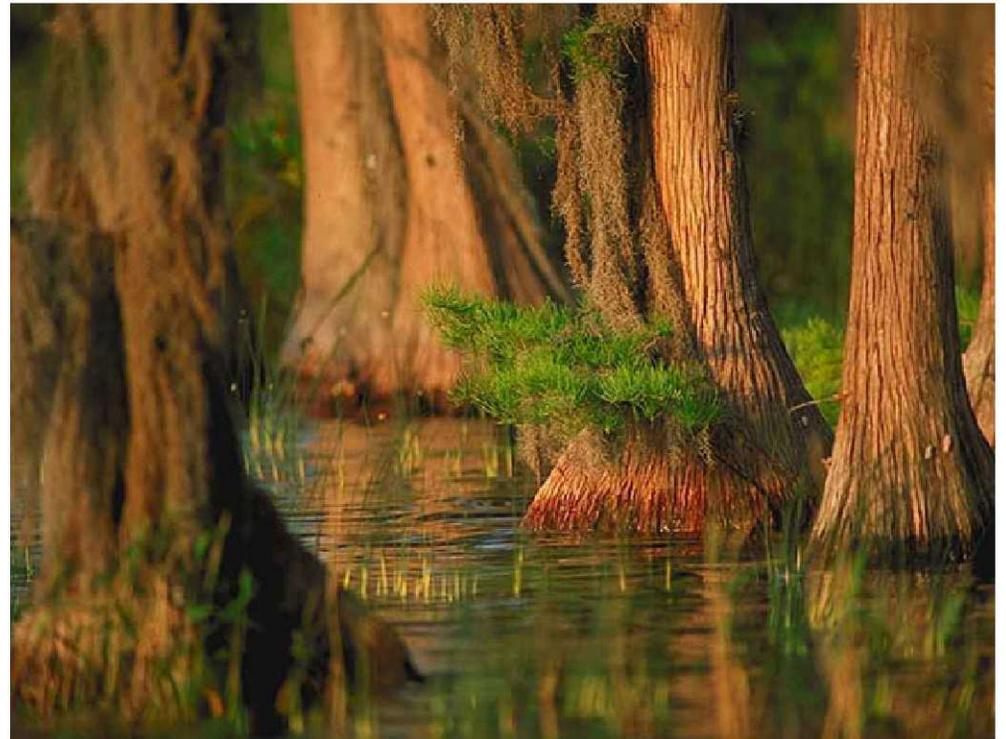
**Michael Tompkins
Senior Project Manger
Ecosystem Restoration Planning Bureau**

sfwmd.gov

Purpose of the LRWRP

Project Purpose

Improve freshwater flows to the Northwest Fork of the Loxahatchee River, which is a nationally designated Wild and Scenic River, and to restore the hydrology and connectivity of wetlands and watersheds that form the historic headwaters of the river



LRWRP Objectives

- **Objective 1:** Restore wet and dry season flows to the nationally designated Wild Scenic Northwest Fork of the Loxahatchee River
- **Objective 2:** Restore oysters, seagrass and other estuarine communities in the Loxahatchee River Estuary
- **Objective 3:** Increase spatial extent and function of wetlands
- **Objective 4:** Restore watershed connections among the Loxahatchee River headwater natural areas to improve hydrology, sheetflow, hydroperiods, natural storage and vegetative communities
- **Objective 5:** Restore abundance and diversity of native plant and animal species in watershed, natural areas, river and estuary



Authorized Plan: Alt 5R

Flow Way 3

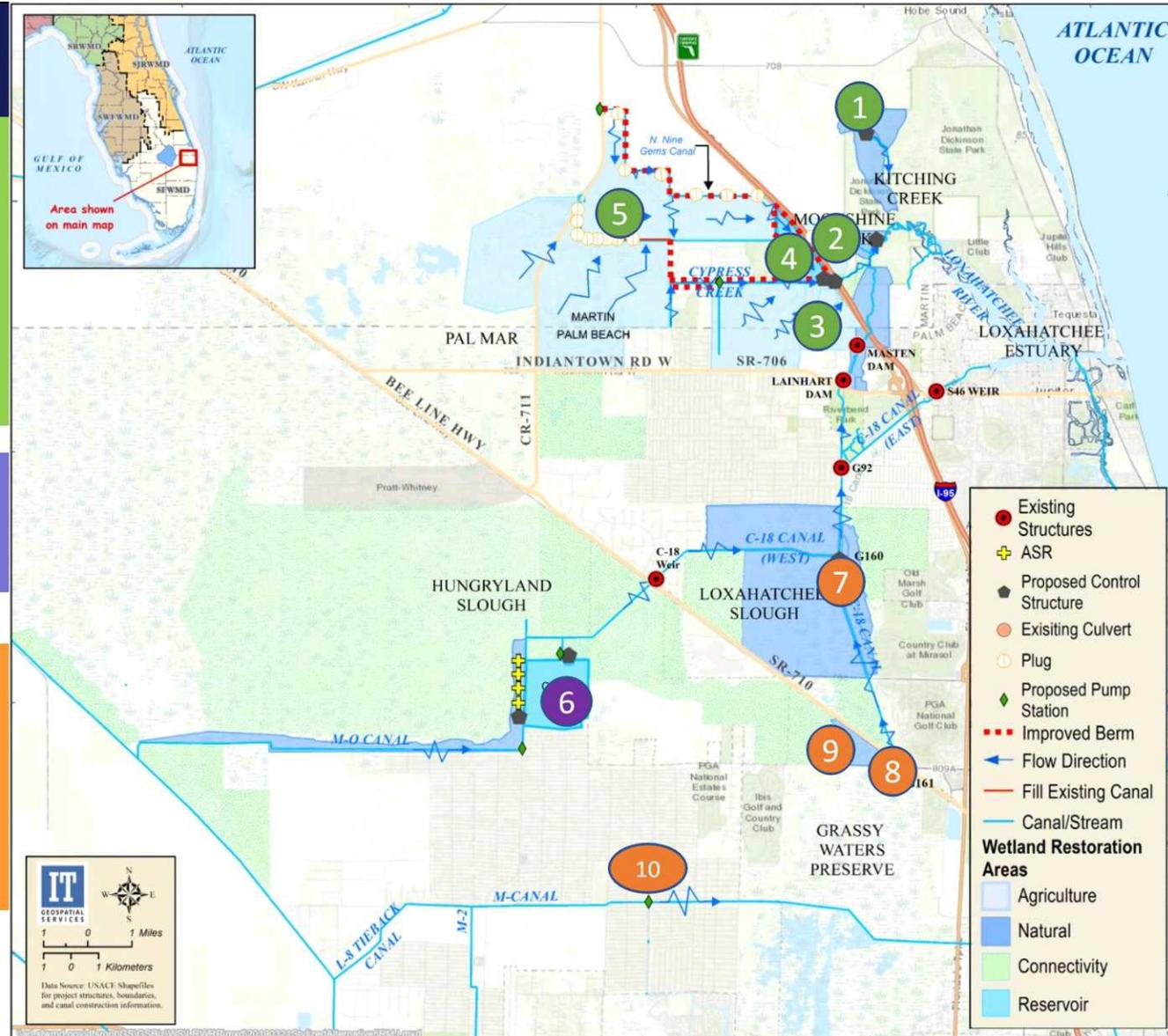
- 1 - Kitching Creek
- 2 - Moonshine Creek/Gulfstream East
- 3 - Cypress Creek Canal
- 4 - Gulfstream West
- 5 - Palmar East

Flow Way 2

- 6 - C-18W Impoundment (9,500 ac/ft & 4 ASR wells)

Flow Way 1

- 7 - G-160 Structure
- 8 - G-161 Structure
- 9 - Grassy Waters Triangle
- 10 - M-1 Pump Station



Project Benefits

- Northwest Fork of Loxahatchee River target flows
 - 91% dry season
 - 98% wet season
 - Promotes recovery of riverine freshwater species and estuarine zones for fish, seagrass, oysters and other protected species
- Improves watershed wetland hydrology
 - 17,000 acres existing or former agricultural lands
 - 10,000 acres existing natural areas
- Improves/maintains ecological connectivity for ~78,000 acres
- Provides additional recreation opportunities

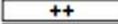
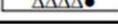
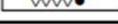


Project Schedule

INTEGRATED DELIVERY SCHEDULE 2023 UPDATE

SOUTH FLORIDA ECOSYSTEM RESTORATION | CENTRAL AND SOUTHERN FLORIDA COMPREHENSIVE EVERGLADES RESTORATION PLAN

PROJECT LOCATOR	PROJECT	YELLOW BOOK COMPONENT	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W	2031	2032 W	2033	2034 W
CERP GENERATION 4 (AUTHORIZED IN WRDA 2020)															
P16	Loxahatchee River Watershed Restoration Project	K, OPE	●●●●●	●●●●●	●●●●●										
	Flow-way 1 (M-1 Canal, G160/161 and Grassy Water Preserve)				●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Flow-way 2 (C-18 Impoundment)			●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Flow-way 2 (ASR Wells)							●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
	Flow-way 3 (Kitching Creek, Moonshine Creek, Gulfstream East, Cypress Creek Canal, Gulfstream West, and Palmar East)		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●

	Non-federal		Does not reflect budgetary development dollars or capability		Design, PPA Execution, Real Estate Acquisition
	Federal		Expected WRDA year		Construction (Initiated by award of construction contract)
	Fiscal Closeout		Project Implementation Report		Operational Plan
	Monitoring		Project Implementation Report with Exemption		Operational Testing and Monitoring Period

Flow-way 1

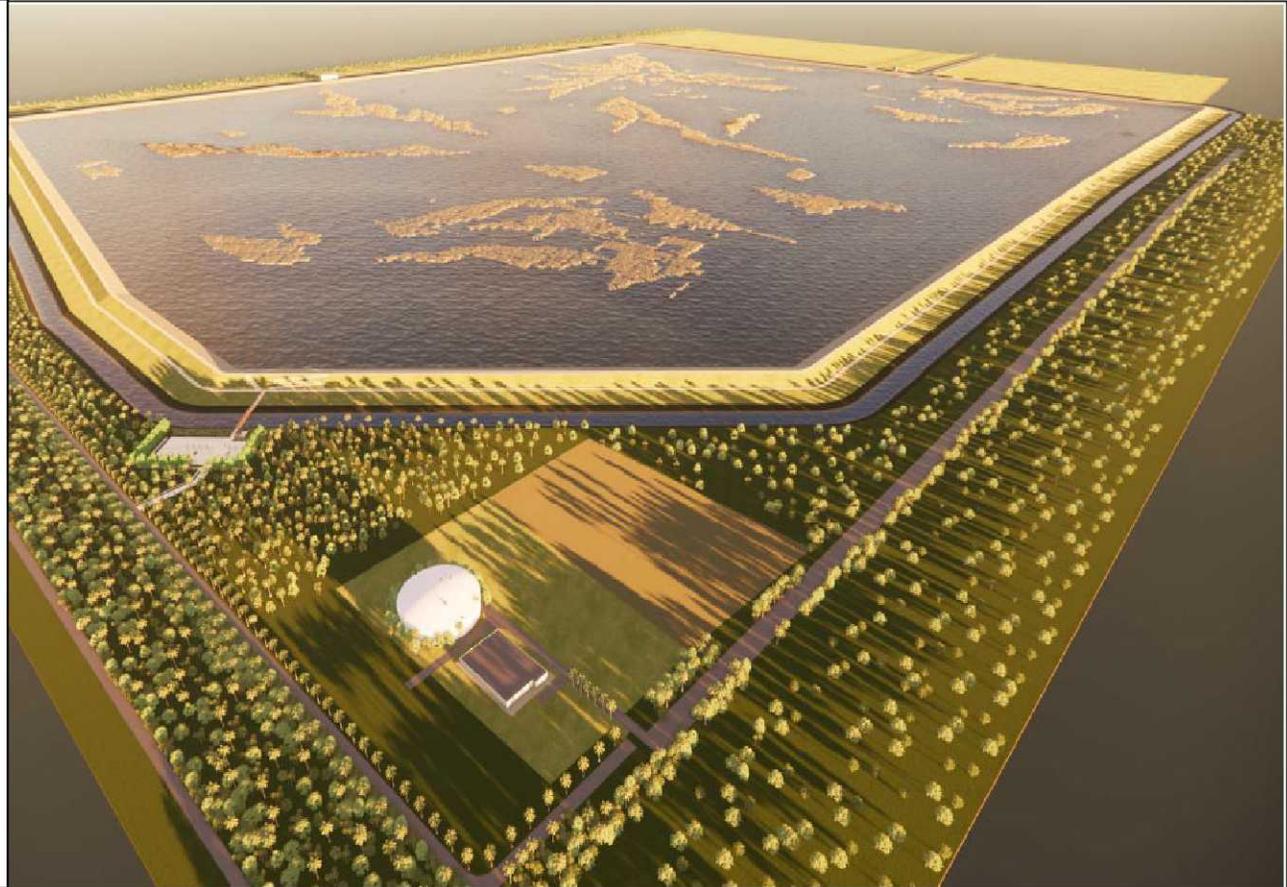
- Project Features
 - M-Canal Pump Station
 - Grassy Waters Triangle Regrading
- Purpose
 - Capture excess water from ITID Lower Basin that would otherwise be lost to tide and redirect to NW Fork of Lox River.
 - Restore and enhance connectivity for Wildlife
- Status
 - Design SOW pending execution in FY24



Flow-way 2 Status

General Info:

- Preliminary Design Contract Executed FY23 with Arcadis
- Contract Includes
 - Survey & Geotech
(Jul-2023 to Apr-2024)
 - Modeling
(Dec-2023 to Jul-2024)
 - Preliminary Design
(Oct-2024 to Jun-2025)
- Intermediate and Final Design Phases to Follow



Flow-way 3

➤ Project Features

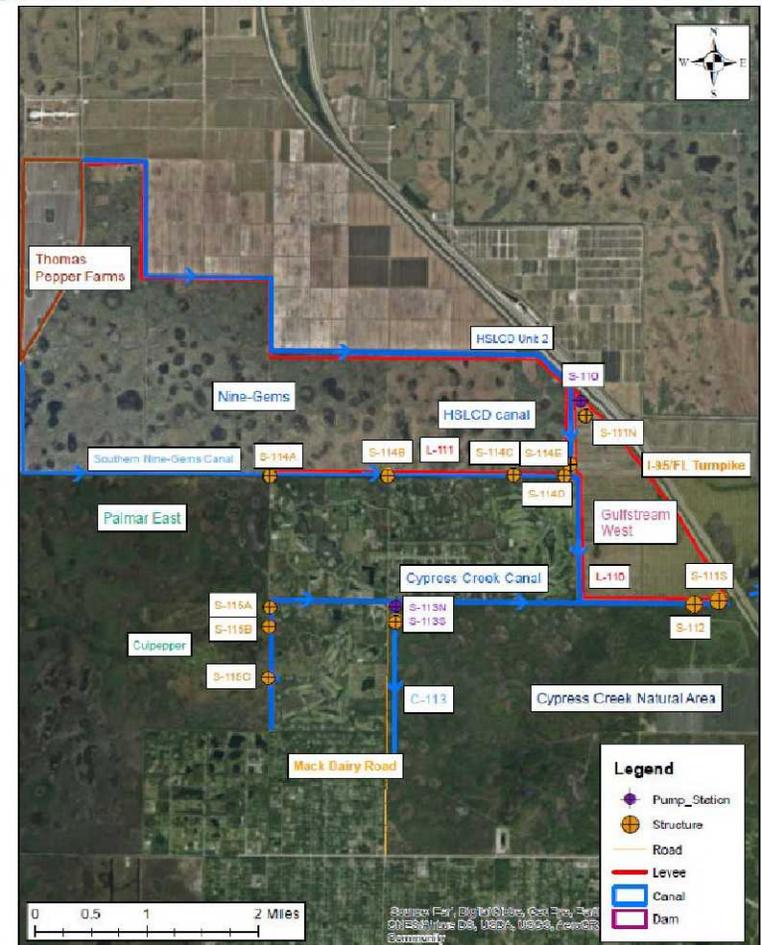
- Gulfstream East Regrading, Moonshine Creek Weir, OTL Bridge (not shown)
- Gulfstream West Flow Thru Marsh
- Palmar East Restoration and Connectivity
- Cypress Creek Weir and Berm Improvements
- Mack Dairy Spreader Swale
- Kitching Creek Spreader Swale (not shown)

➤ Purpose

- Improve hydroperiod and ecological function of wetlands.
- Improve timing of discharges to NW fork.
- Restore historic topography.
- Reduce over draining.
- Enhance habitat for wildlife by restoring connectivity and hydrology.

➤ Status

- Design contract executed with WSP in FY23.
- Survey, Geotech, and Modeling are in progress



Flowway 3 Gulfstream East Before and After Mowing

Before (June 6, 2023)

After (April 26, 2024)



Gulfstream East Brazilian Pepper Mowing





Discussion

Loxahatchee River in
Palm Beach County

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