Agenda

1. Project Overview
2. Purpose, Objectives, and Benefits
3. Flow-way 1 Status Update
4. Flow-way 2 Deep Dive
   - C-18W Impoundment
   - Revised layout and Design Progress
   - FPL Relocation
5. Flow-way 3 Status Update
6. Discussion

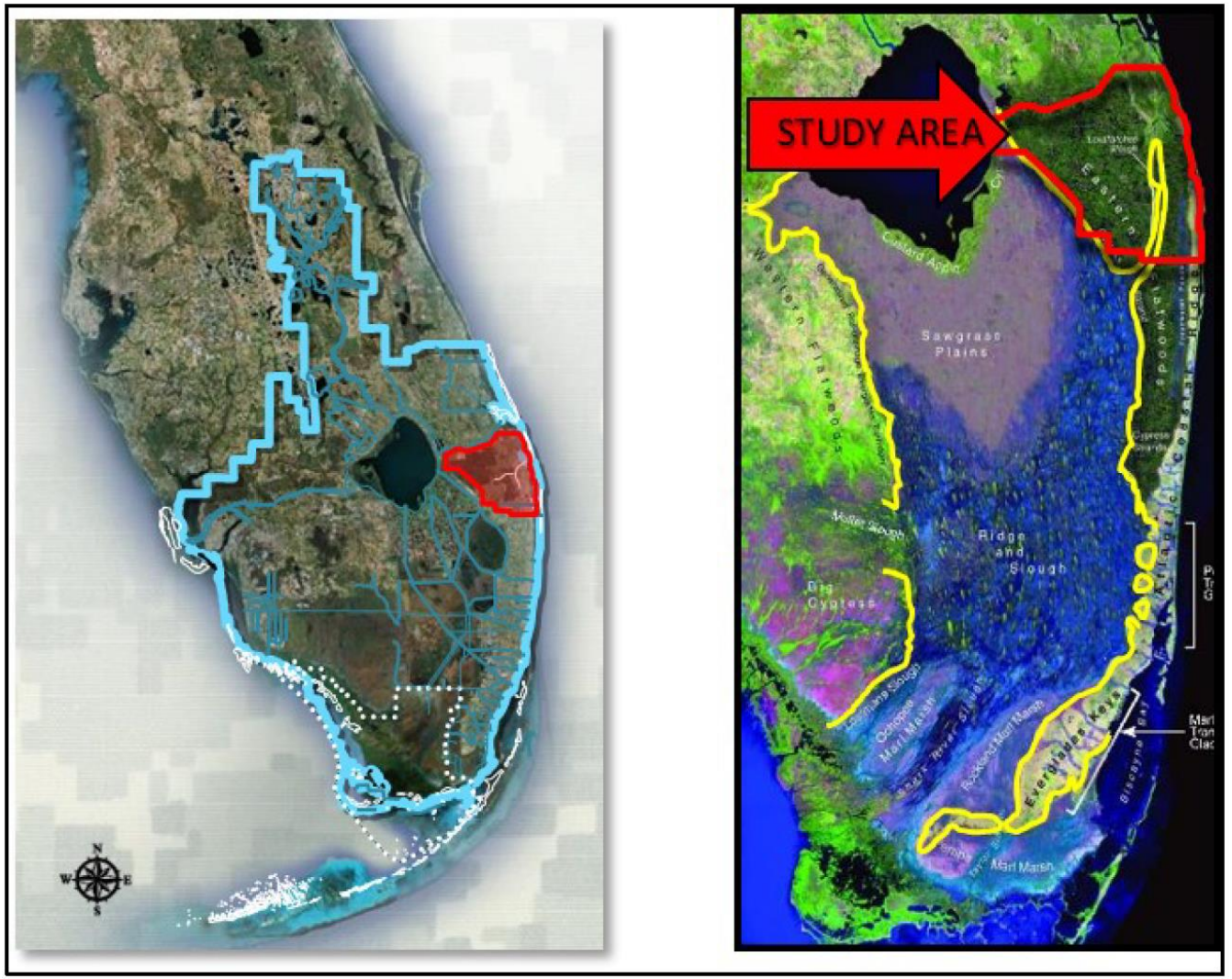
Overall Project Status

Tasks Completed:

- Project authorized by Congress – Water Resources Development Act 2020
- Restricted Allocation Area (RAA) rulemaking – June 2022
- Pre-partnership Credit Agreement (PPCA) – July 2022
- Tasks Underway:
- Preliminary Design
- Relocations
- Permitting
- Agreement Discussions

Project Study Area

1. Study area is ~480,000 acres (~750 mi^2)
2. Current land use
   - Highly urbanized in east
   - Natural areas in west and north
3. Historically dominated by mosaic of wetlands, upland and sloughs



Purpose of the LRWRP

Project Purpose

- Improve freshwater **flows** to the Northwest Fork of the Loxahatchee River
- Restore the **hydrology** and **connectivity** of wetlands and watersheds that form the historic headwaters of the river

Objectives

Objective 1: Restore wet and dry season **flows** to the River

Objective 2: Restore oysters, seagrass and other estuarine communities in the **Estuary**

Objective 3: Increase spatial extent and function of **wetlands**

Objective 4: Restore watershed **connections** among the 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

Project Benefits

1. Northwest Fork of Loxahatchee River target flows
   - 91% dry season,
     - 30-day average at least 69 cubic feet per second (cfs)
   - 98% wet season
     - at least 120 cubic feet per second (cfs) for 120 days
2. Improves watershed wetland hydrology
   - 17,000 acres existing or former agricultural lands
   - 10,000 acres existing natural areas
3. Improves/maintains ecological connectivity for ~78,000 acres
4. Provides additional recreation opportunities


Vallisneria sp.


Loxahatchee Floodplain

Authorized Plan: Alt 5R

Flow Way 3

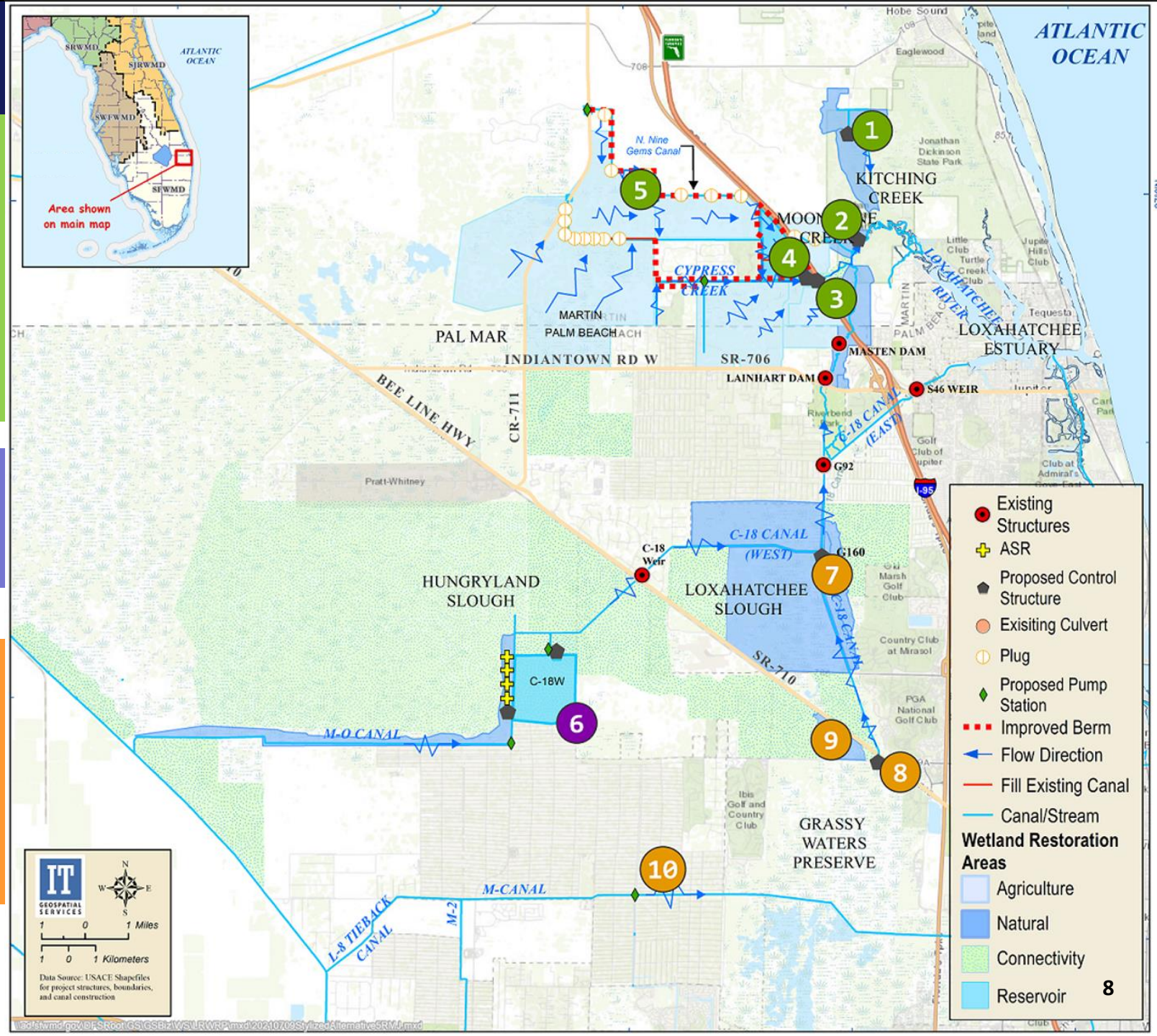
1 - Kitching Creek
2 - Moonshine Creek/Gulfstream East
3 - Cypress Creek Canal Improvements
4 - Gulfstream West Flow Thru Marsh
5 - Palmar East

Flow Way 2

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

Flow Way 1

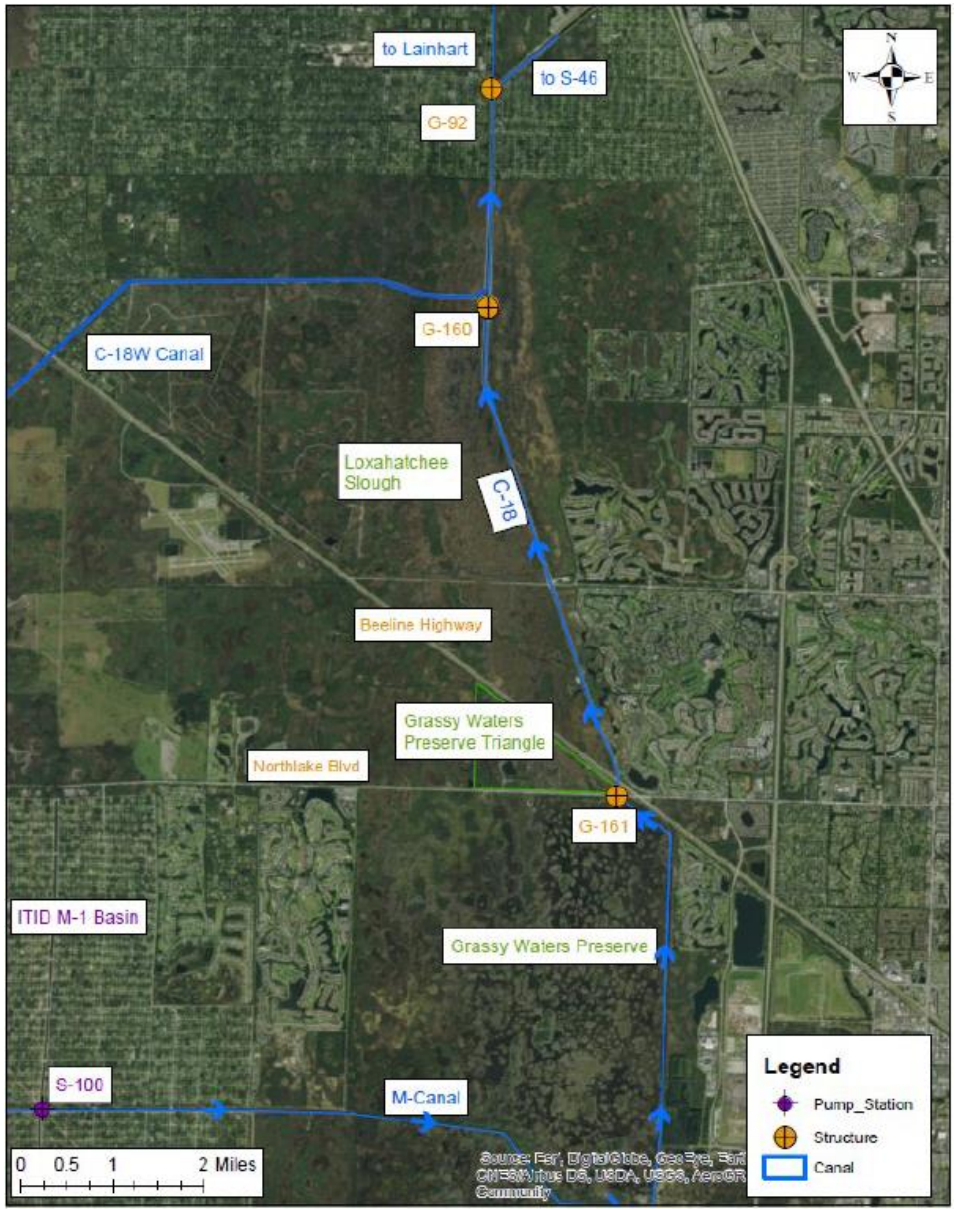
7 - G-160 Structure (built)
8 - G-161 Structure (built)
9 - Grassy Waters Triangle
10 – M-1 Pump Station



Flow-way 1

Flow-way 1

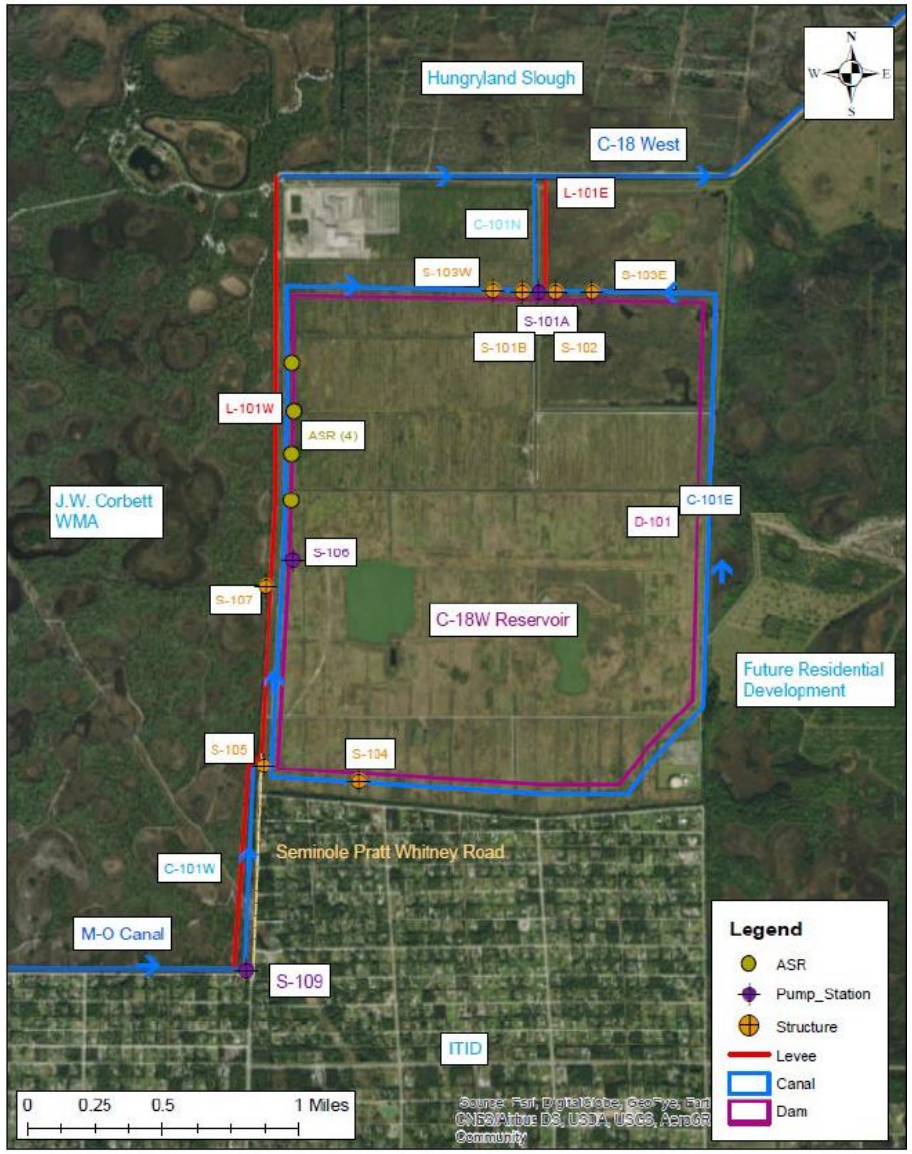
1. Project Features
   - M-Canal Pump Station (S-100)
   - Grassy Waters Triangle Regrading
2. Purpose
   - Capture excess water from Indian Trail Improvement District Lower Basin that would otherwise be lost to tide and redirect to Northwest Fork of the Loxahatchee River.
3. Status
   - Agreements and stakeholder engagement – Ongoing
4. Next Steps
   - Modeling contract execution – June/July 2026
   - Preliminary design - to follow modeling
   - Ready to Advertise ~2029



Flow-way 2 – C-18W Impoundment

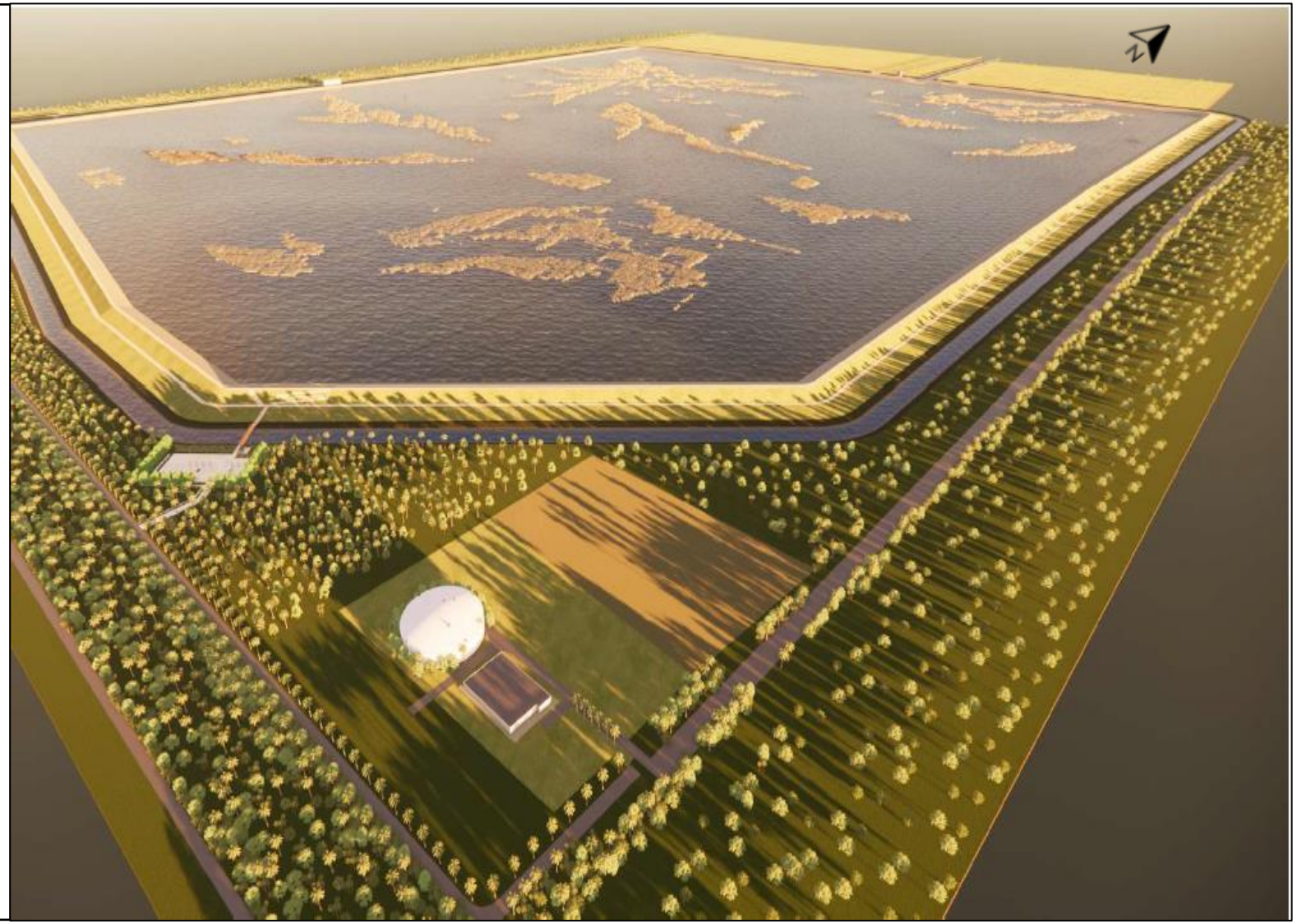
Flow-way 2

1. Project Features
   - C-18W Impoundment & 4 co-located Aquifer Storage & Recovery (ASR) wells
2. Purpose
   - Provide water delivery to the Northwest fork of the Loxahatchee River to achieve restoration target flows
   - Capture water that would otherwise be sent to tide and redirect to the Northwest fork of the Loxahatchee River.



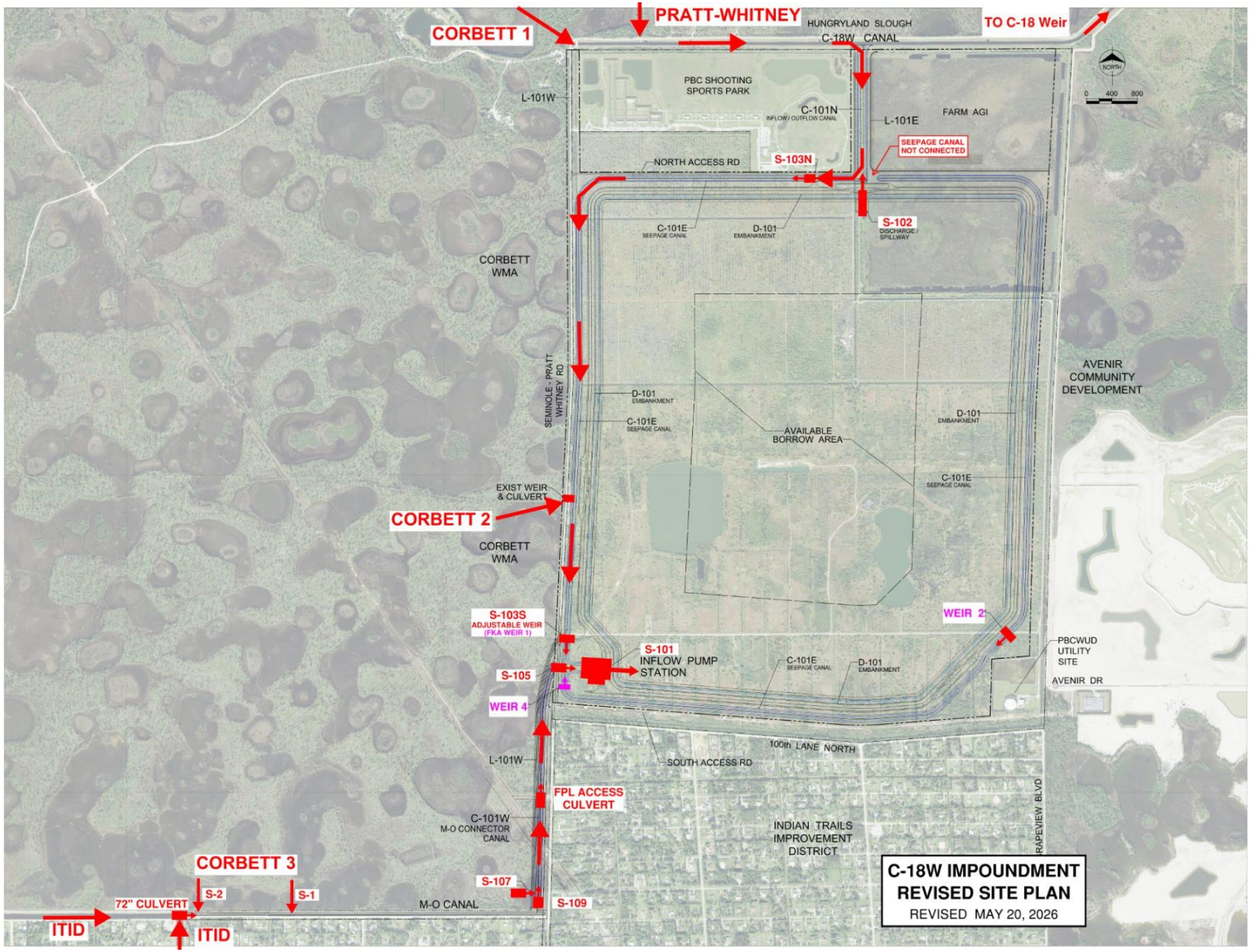
Flow-way 2

1. Status
   - Preliminary Design Contract (Arcadis) - Executed July 2023
   - Design Charette - Sep 2024
   - Site investigations - ongoing
   - Preliminary design underway - Jan 2027
   - Agreements and stakeholder engagement - Ongoing
2. Next Steps
   - Intermediate and final design contract
   - Ready to Advertise ~2029



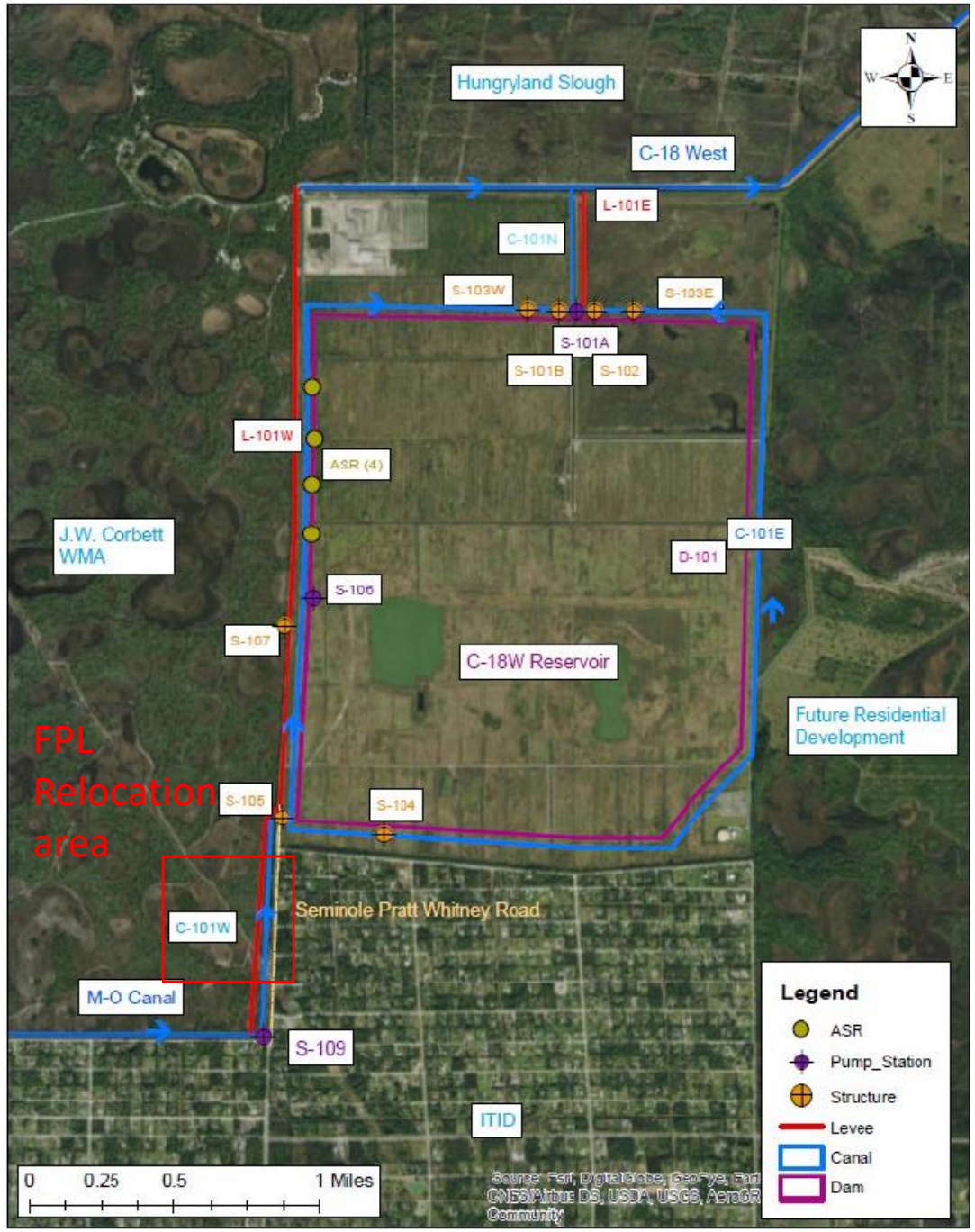
Revised Flow-way 2 Layout Post Design Charette (Sep-2024)

1. S-101 single inflow pump station SW corner (3 pumps in PIR)
2. S-102 combined discharge and emergency spillway
3. S-109 adjustable weir gate
   - Prevents over draining Indian Trail Improvement District during routine operation
   - Operable during high water events
4. Weirs in seepage canal
   - Maintain lower water levels adjacent to Avenir and Indian Trail Improvement District



Flow-way 2 Florida Power & Light Relocation/C-101W/L-101W

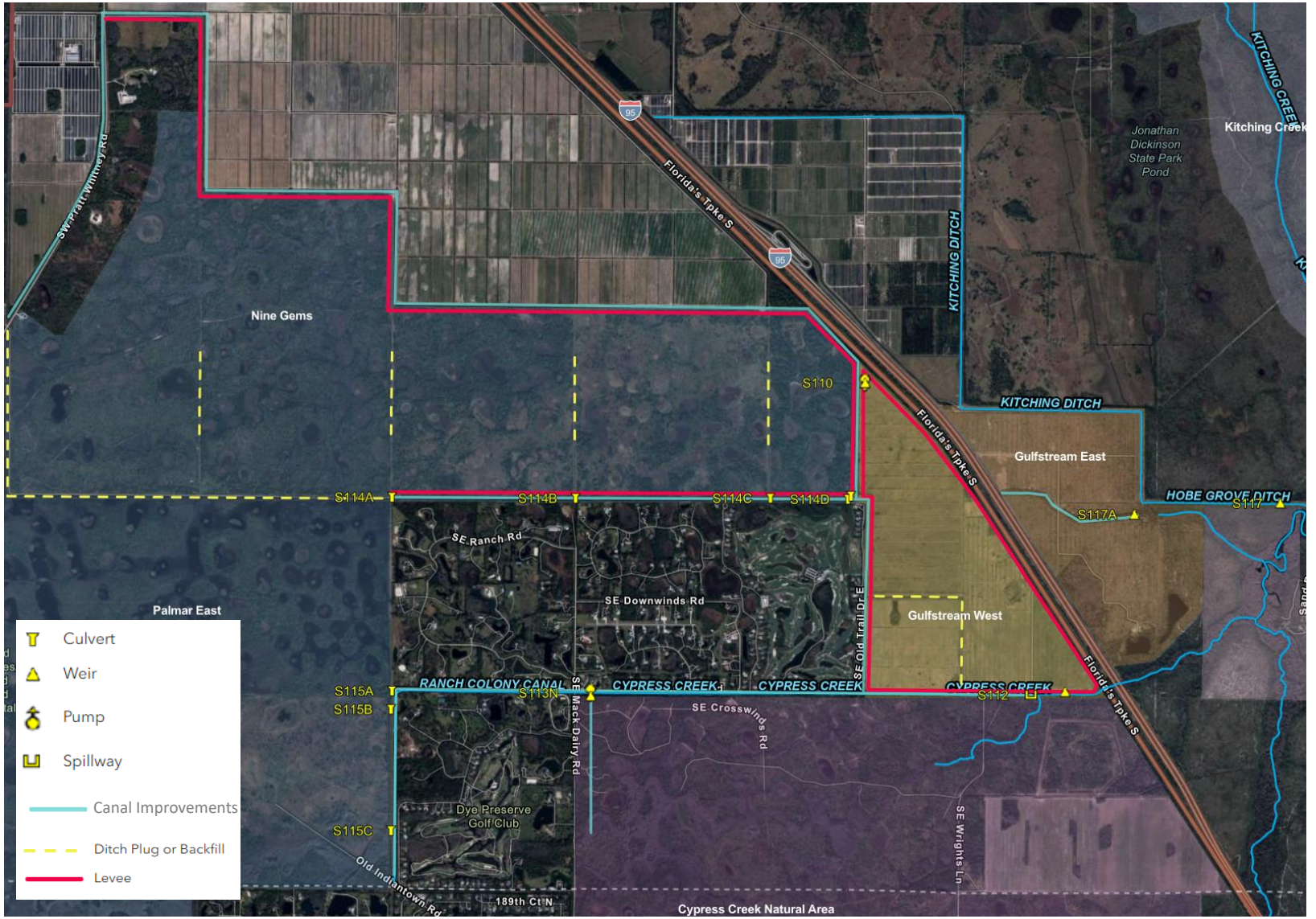
1. Transmission poles in M-0 connector canal footprint
   - Vertical clearance issue, lines too low to work under
   - Construction of C-101W/L-101W requires relocation
2. Preliminary design complete, final cost estimate June
   - ~$6M to move poles



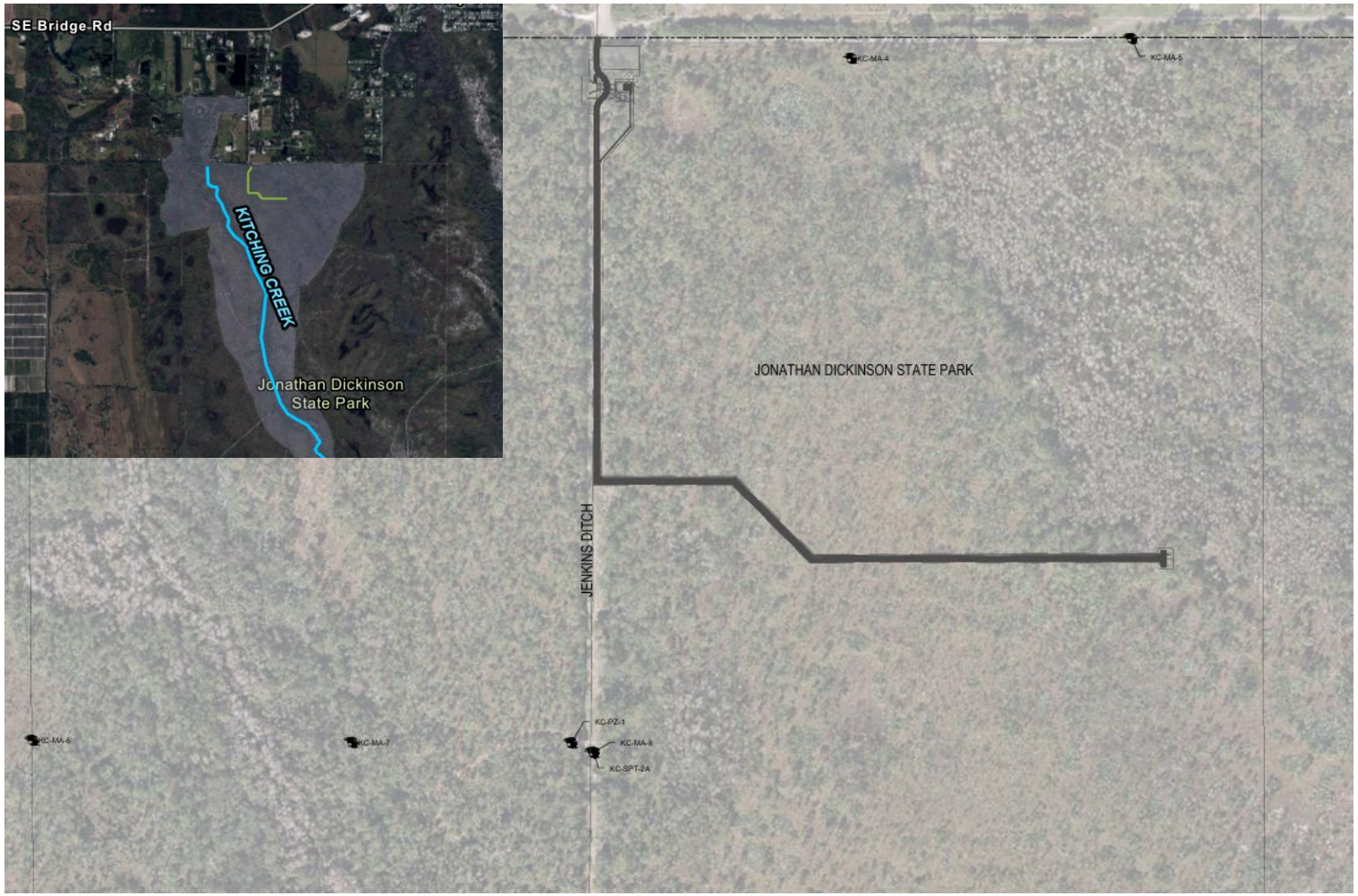
Flow-way 3

Flow-way 3 Status

1. Design contract (WSP) - executed Nov 2022
2. Site investigations and semi-regional modeling – complete Apr 2026
3. Preliminary Design of Gulfstream East and Kitching Creek - Ongoing
4. Permitting, Cultural Resources Surveys and Environmental Site Remediation - Ongoing
5. Gulfstream East and Kitching Creek Ready to Advertise ~ late 2027
6. Design contract West of I-95 – pending



Design for Kitching Creek



1. Small pump station (S-116), buried pressurized pipe, bubble up outlet, maintenance road
2. Received letter of consent from DEP Division of Recreation and Parks – Jan 2026
3. Easement, permit, agreement discussions – ongoing
4. Project Implementation Report design included weir and spreader swales
   - Low Design Maturity resulted in new design concept
   - Similar challenges in all flow-ways

Discussion