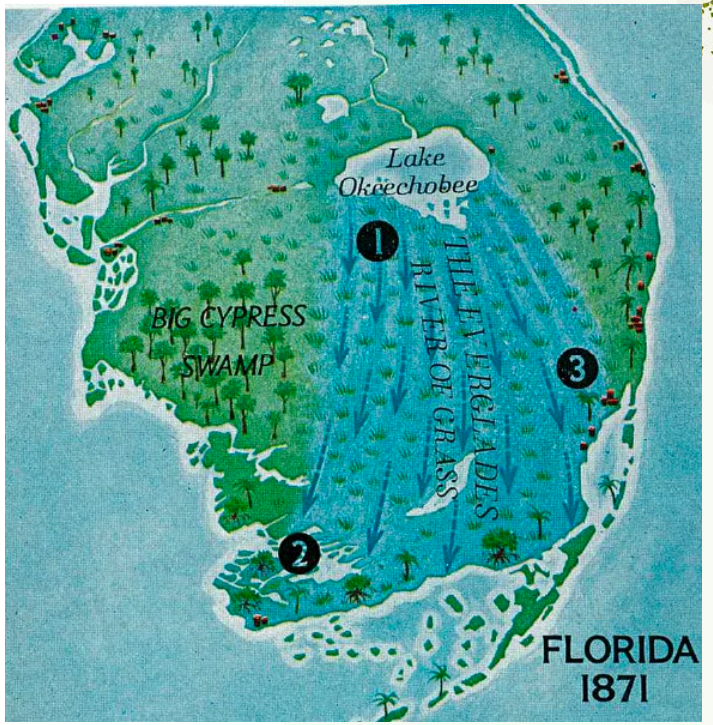
Everglades Restoration is Foundational to South Florida Resilience

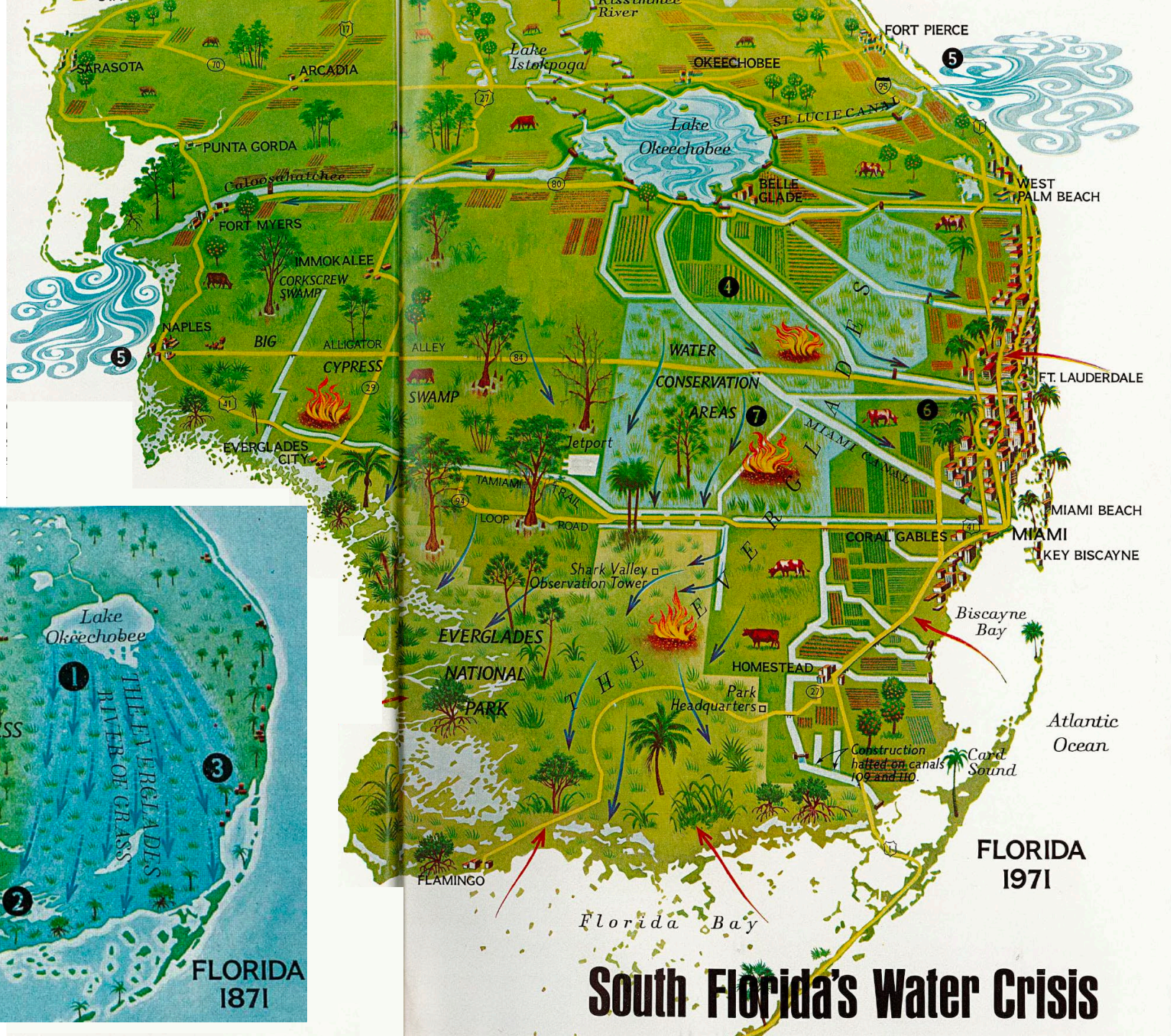
Steve Davis

THE EVERGLADES FOUNDATION

South Florida's water issues have long been recognized

NATIONAL GEOGRAPHIC JAN. 1972

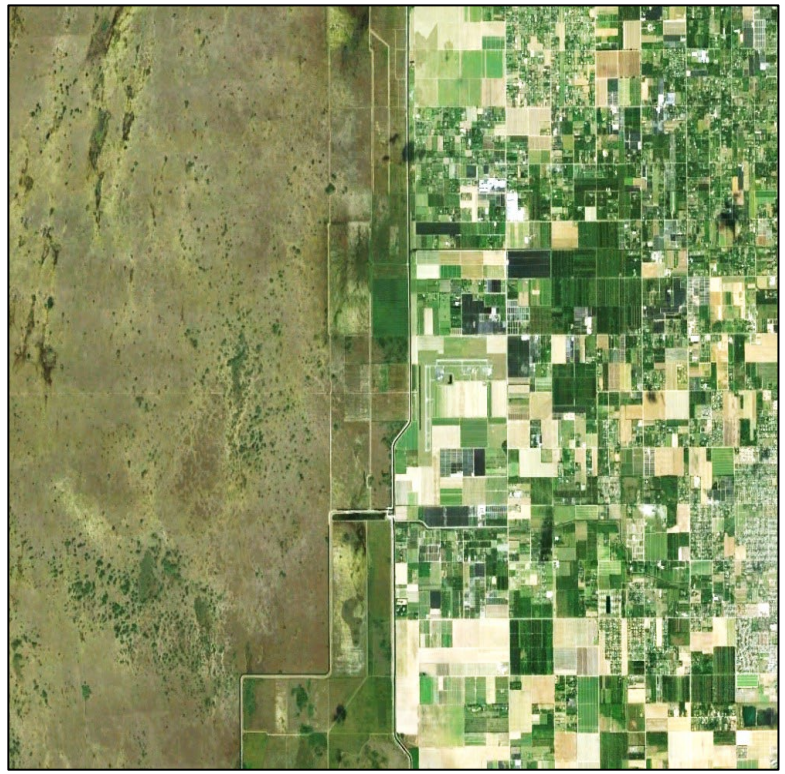




Flood Protection

Palm Beach County

Broward County



Miami-Dade County

Water Supply

Everglades Restoration

Storage, Treatment, Conveyance **Operations**

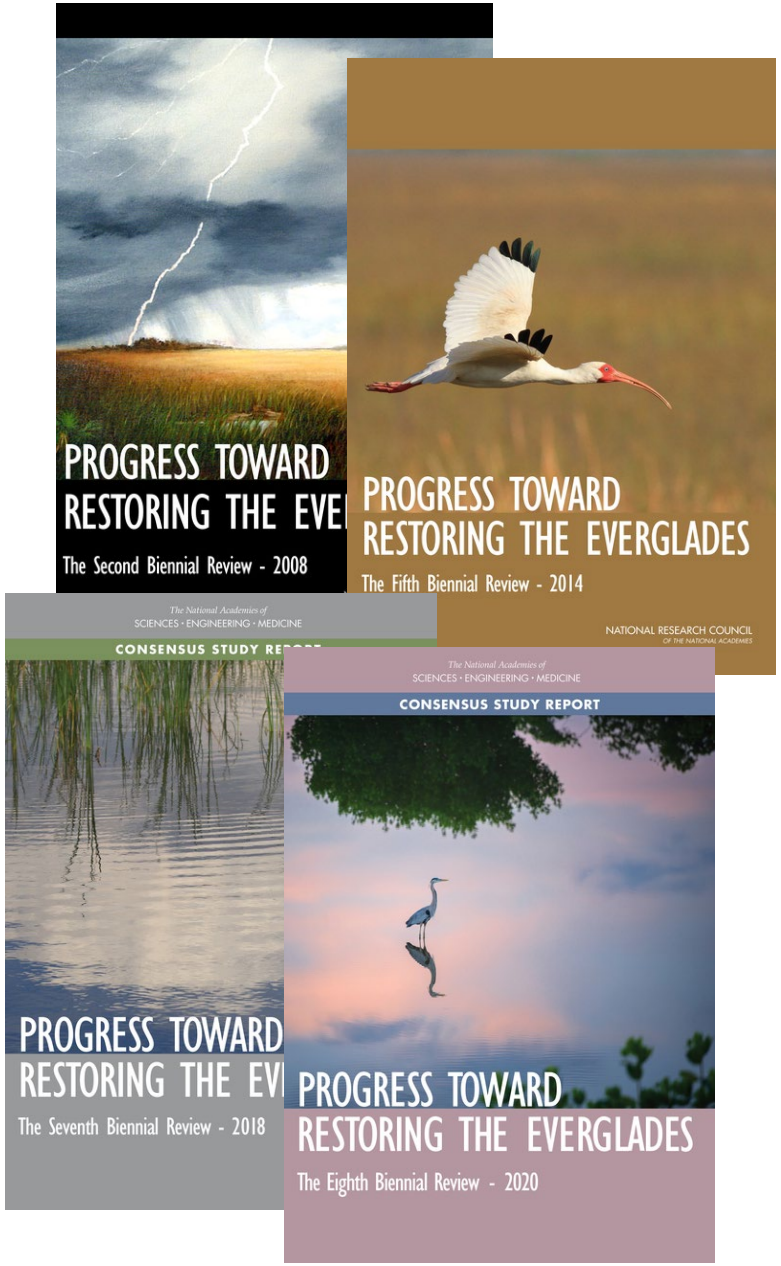
CISRERP Findings

“Everglades restoration efforts are even more essential to improve the condition of the South Florida ecosystem and strengthen its resiliency…”

“Everglades restoration will increase the resilience of the ecosystem and the water management system and decrease their vulnerability.”

“Restoration is likely to create important benefits that increase the resilience of the ecosystem in the face of climate change...”

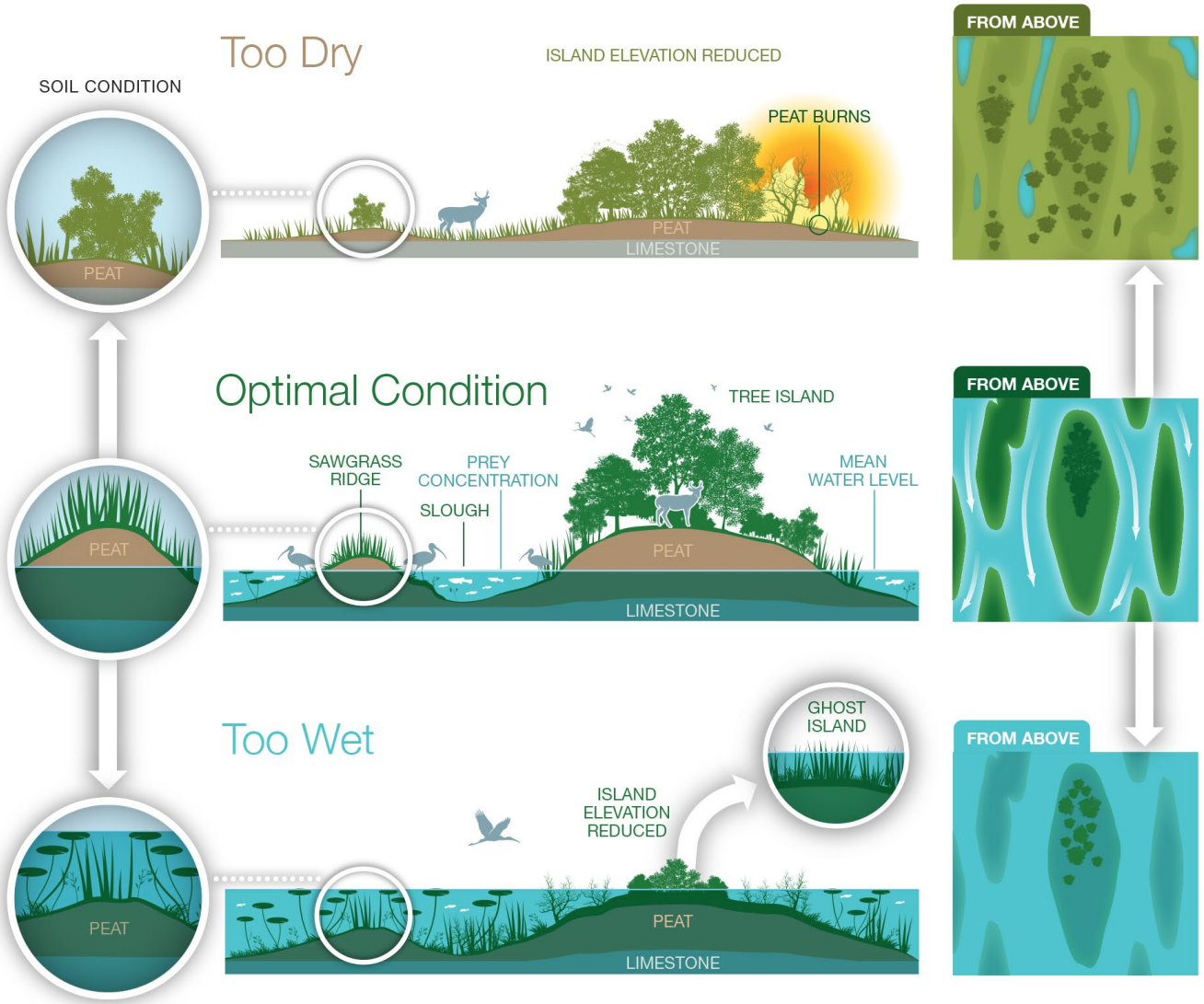
“Improved volumes and timing of freshwater flows could also enhance the diversity of seagrass species, which could help strengthen the resilience of the Bay…”

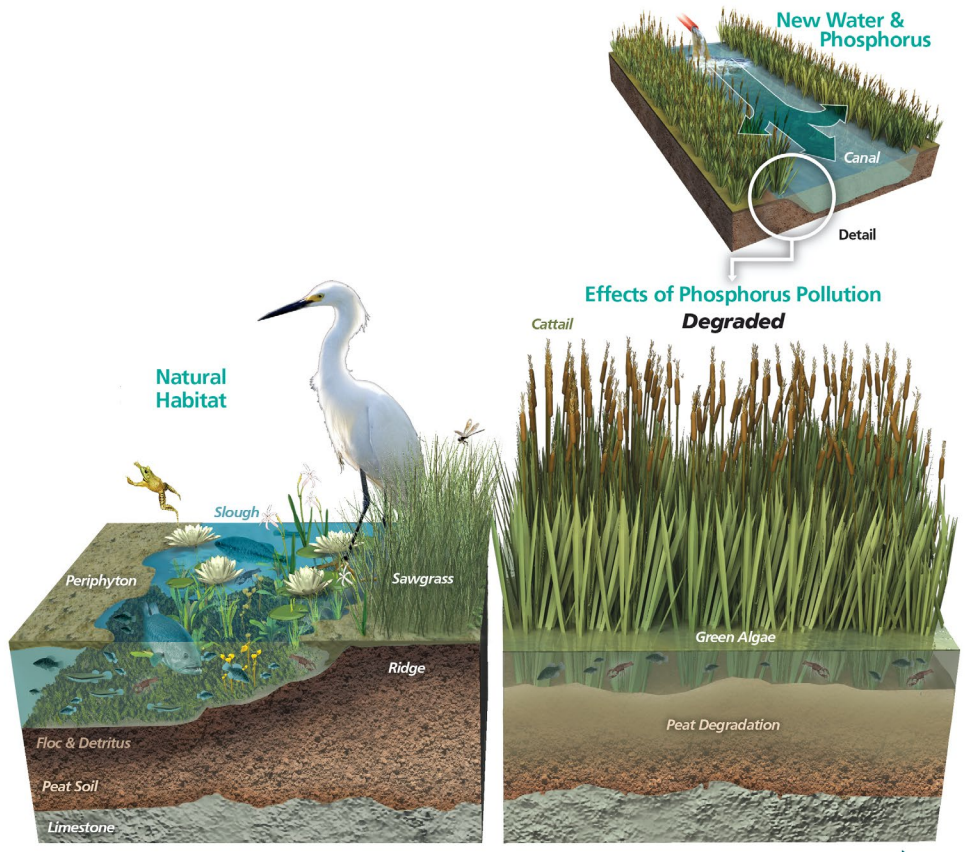


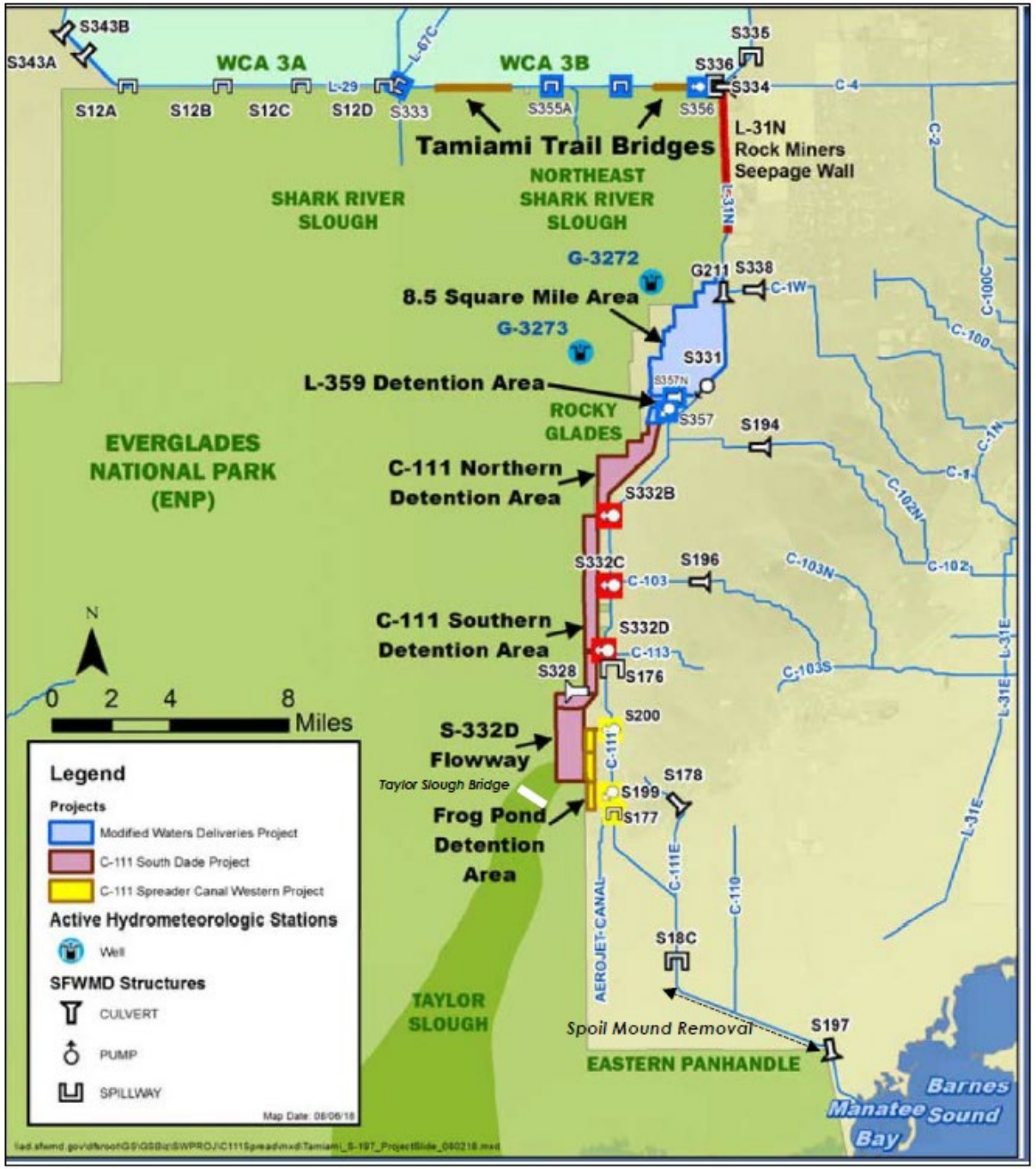
Reducing Lake Okeechobee Discharges

Ed Lippisch February 25, 2024

Restoring Hydrology and Oligotrophic Character







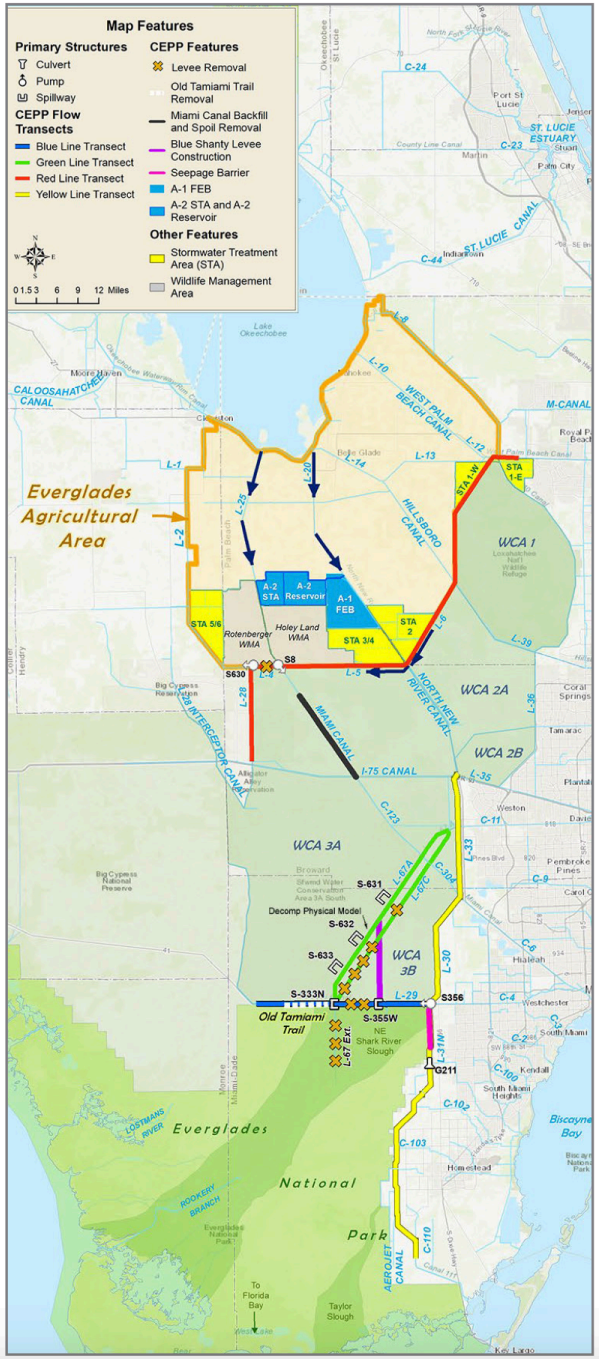
Northeast Shark River Slough

- 1989: Everglades National Park Protection and Expansion Act
- Modified Water Deliveries, C-111 South Dade, and Tamiami Trail Modifications
- 2020: implementation of the Combined Operational Plan (COP)

Central Everglades

- 1997: Talisman deal
- 2000: CERP authorized
- 2011: Initiated expedited planning
- 2014: CEPP authorized
- 2020: EAA Reservoir
- Mid-2030s: operational testing, new Lake O operations

Central Everglades Planning Project | CEPP



STORAGE AND TREATMENT

- Construct 240,000 acre-foot EAA reservoir and 6,500 acre-foot stormwater treatment area, and integrate with A-1 FEB operations.
- Lake Okeechobee operational refinements.

DISTRIBUTION/CONVEYANCE

- Conveyance improvements to Miami and North New River canals.
- Diversion of L-6 flows, infrastructure, and L-5 canal improvements.
- Remove western approximately 2.9 miles of L-4 levee west of S-8 [3,000 cubic feet per second (cfs) capacity].
- Construct 360 cfs pump station (S-630) at western terminus of L-4 levee removal.
- Backfill Miami Canal and Spoil Mound Removal from approx. 1.5 miles south of S-8 to I-75.

DISTRIBUTION/CONVEYANCE

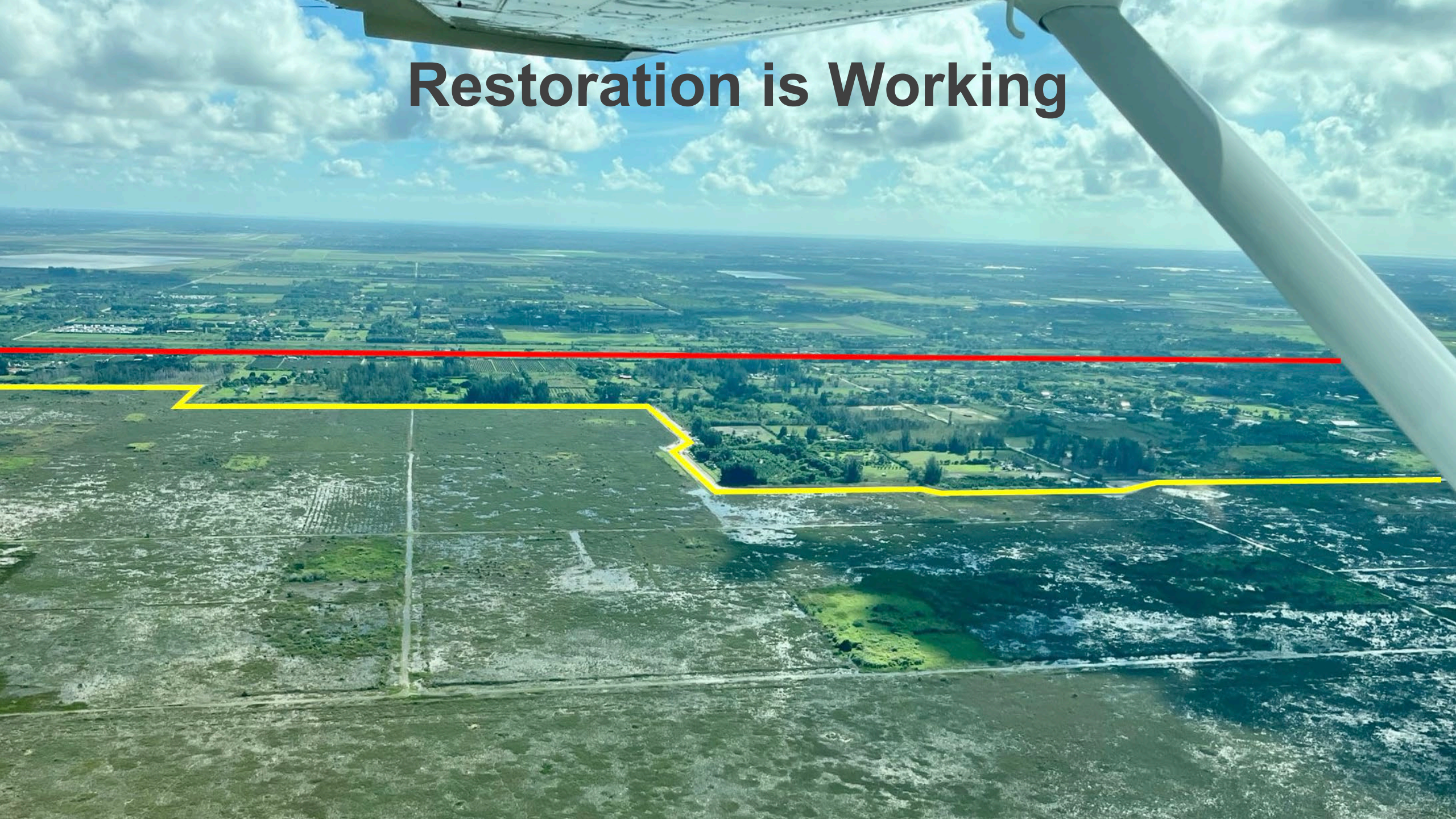
- Increase S-333N capacity to 2,500 cfs (completed).
- One 500 cfs gated structure (S-631) in the L-67A levee, north of the Blue Shanty levee, and 6,000-foot gap in the adjacent L-67C levee.
- Two 500 cfs gated structures in the L-67A levee (S-632, S-633); spoil removal west of L-67A canal north and south of structures.
- Remove approximately 8 miles of L-67C levee in Blue Shanty flow-way (no canal backfill).
- Construct approximately 8.5 mile levee (Blue Shanty levee) in WCA-3B, connecting L-67A to L-29.
- Remove approximately 4.3 miles of L-29 levee in Blue Shanty flow-way; divide structure (S-333W) to the east of Tamiami Trail Next Steps western bridge.
- Remove entire 5.5 miles of L-67 Extension levee; backfill L-67 Extension canal.
- Remove approximately 6 miles of Old Tamiami Trail road (south of L-29 western levee from L-67 Extension to ENP tram road).

SEEPAGE MANAGEMENT

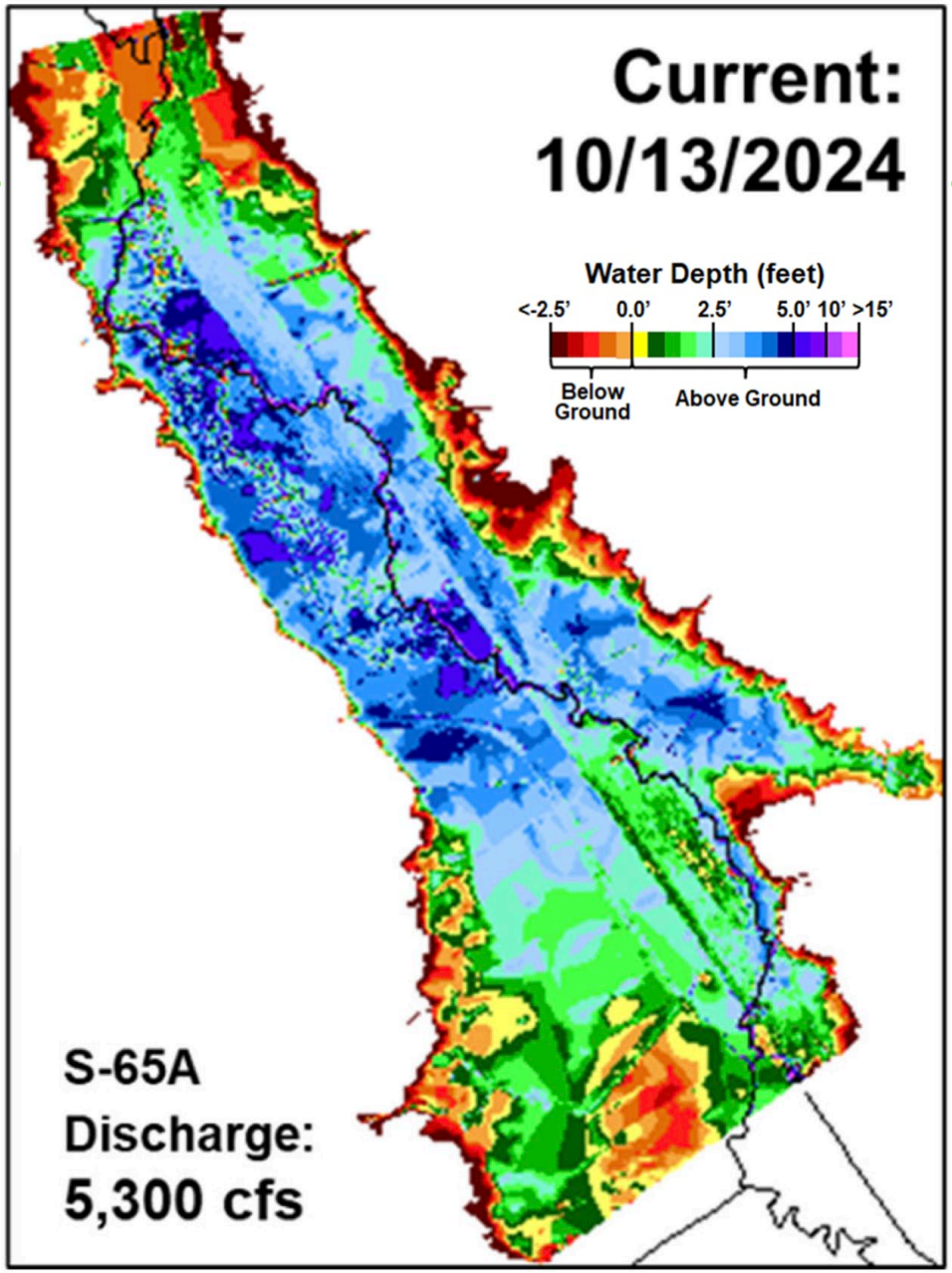
- Construct S-356E pump station capacity to approximately 1,000 cfs.
- Construct 4.2-mile partial-depth seepage barrier south of Tamiami Trail (along L-31N).
- G-211 operational refinements; use coastal canals to convey seepage.

Note: System-wide operational changes and adaptive management considerations will be included in project.

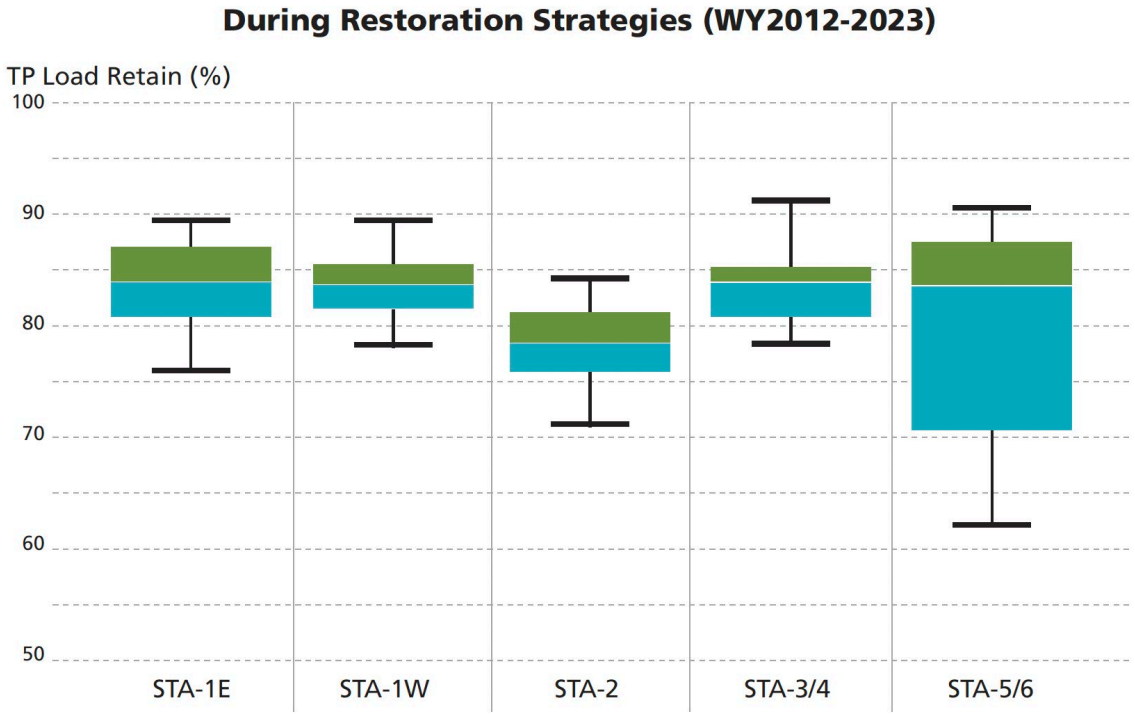
Restoration is Working

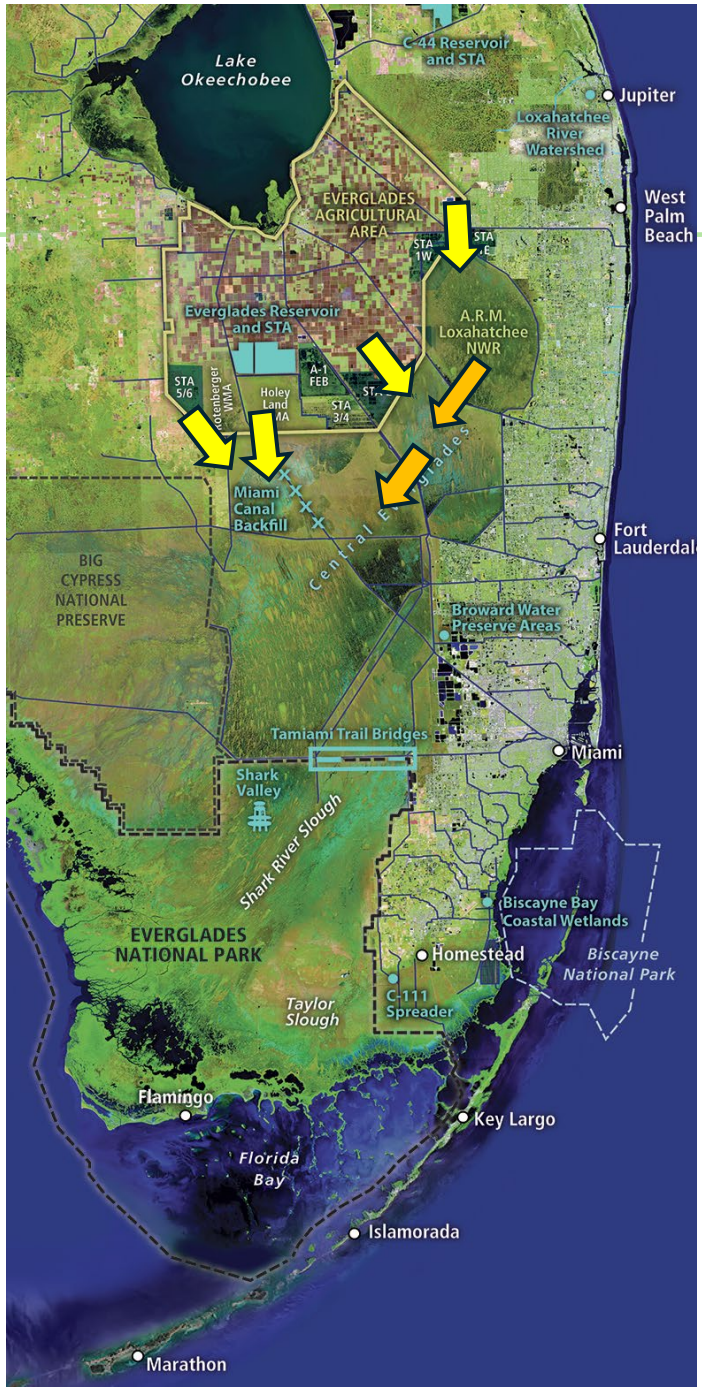


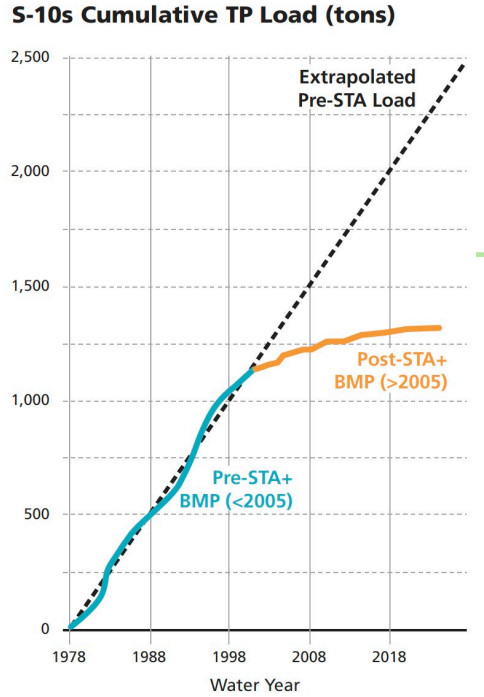
Kissimmee River

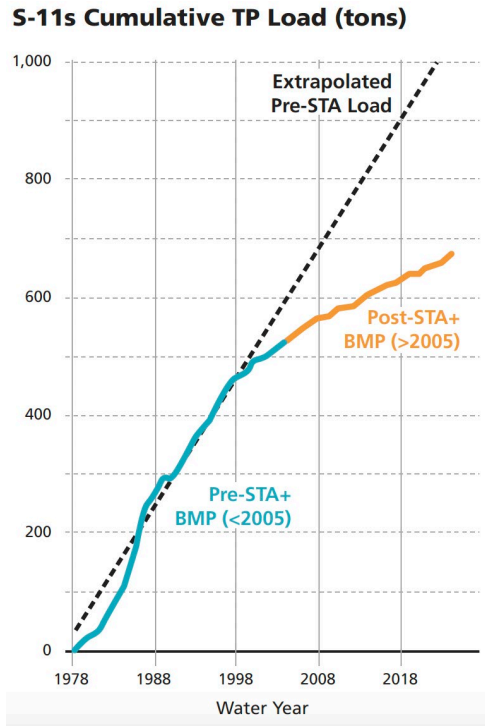


Phosphorus Removal





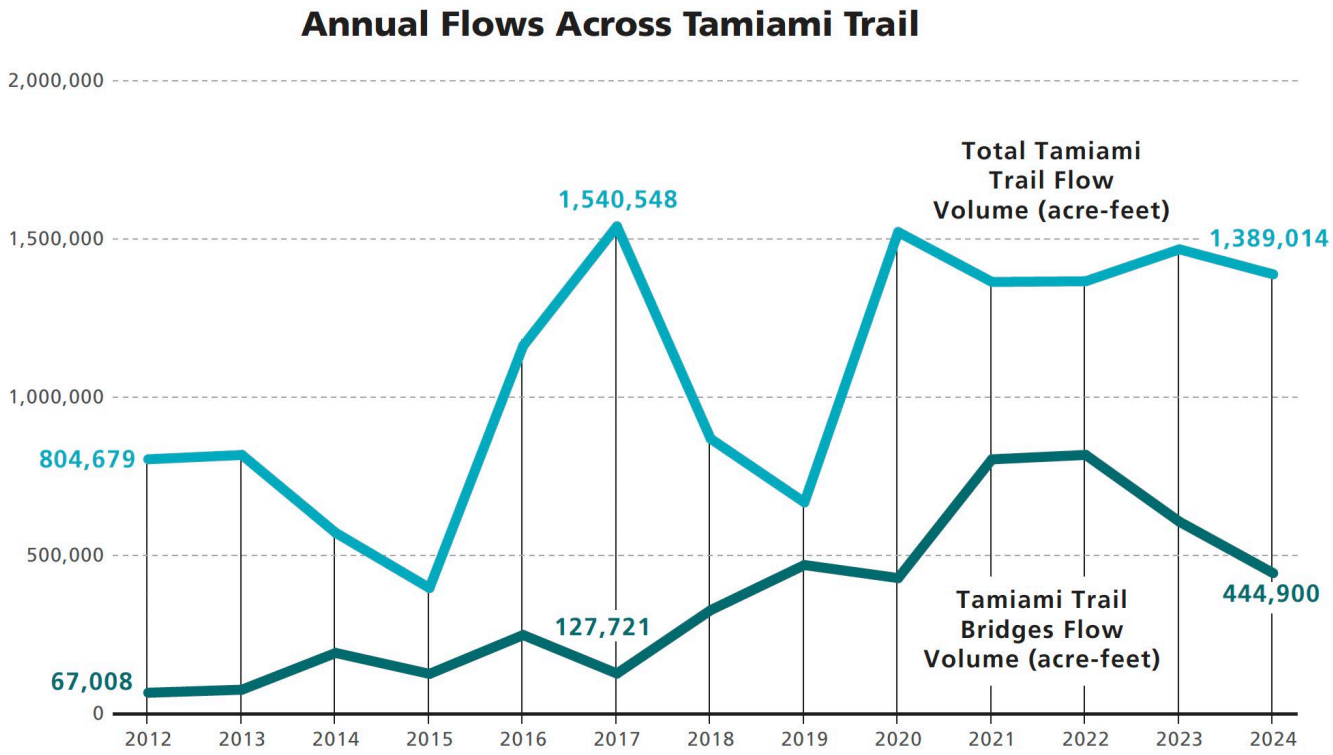


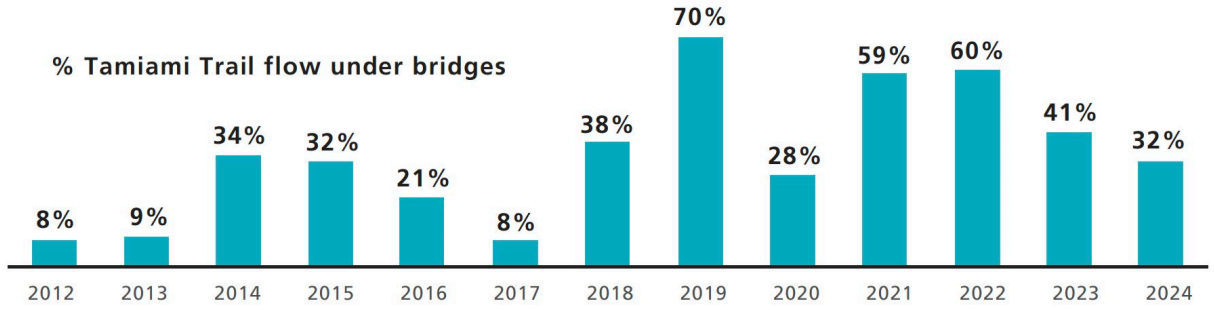


Tamiami Trail Bridges

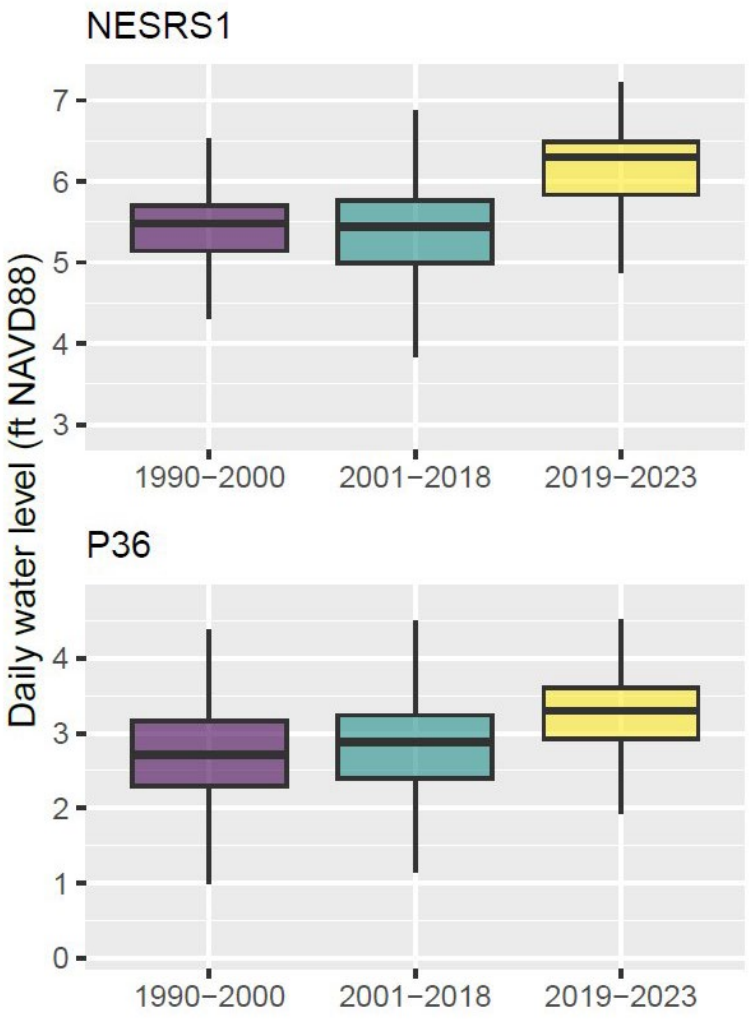
Gary Lickle March 4, 2020

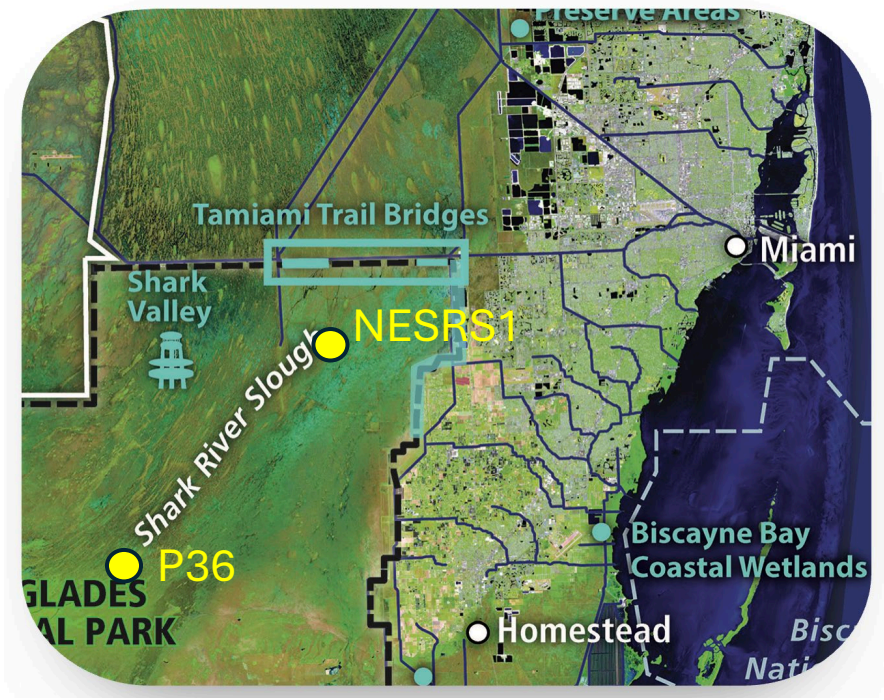
Tamiami Trail Flows

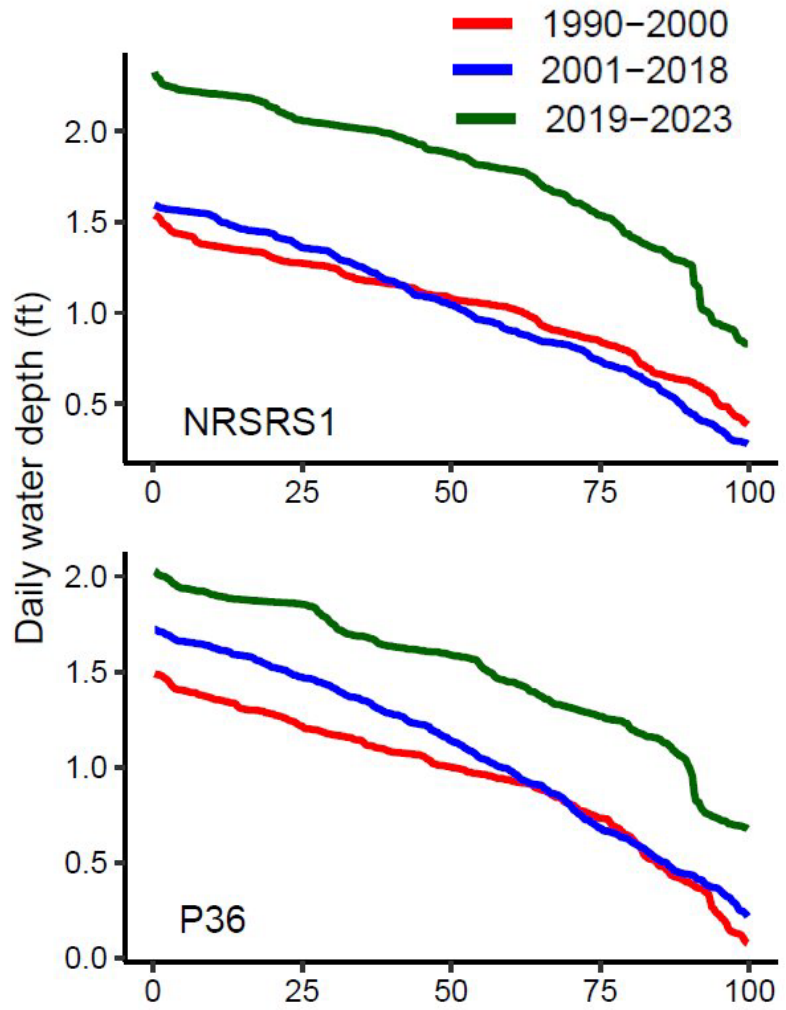




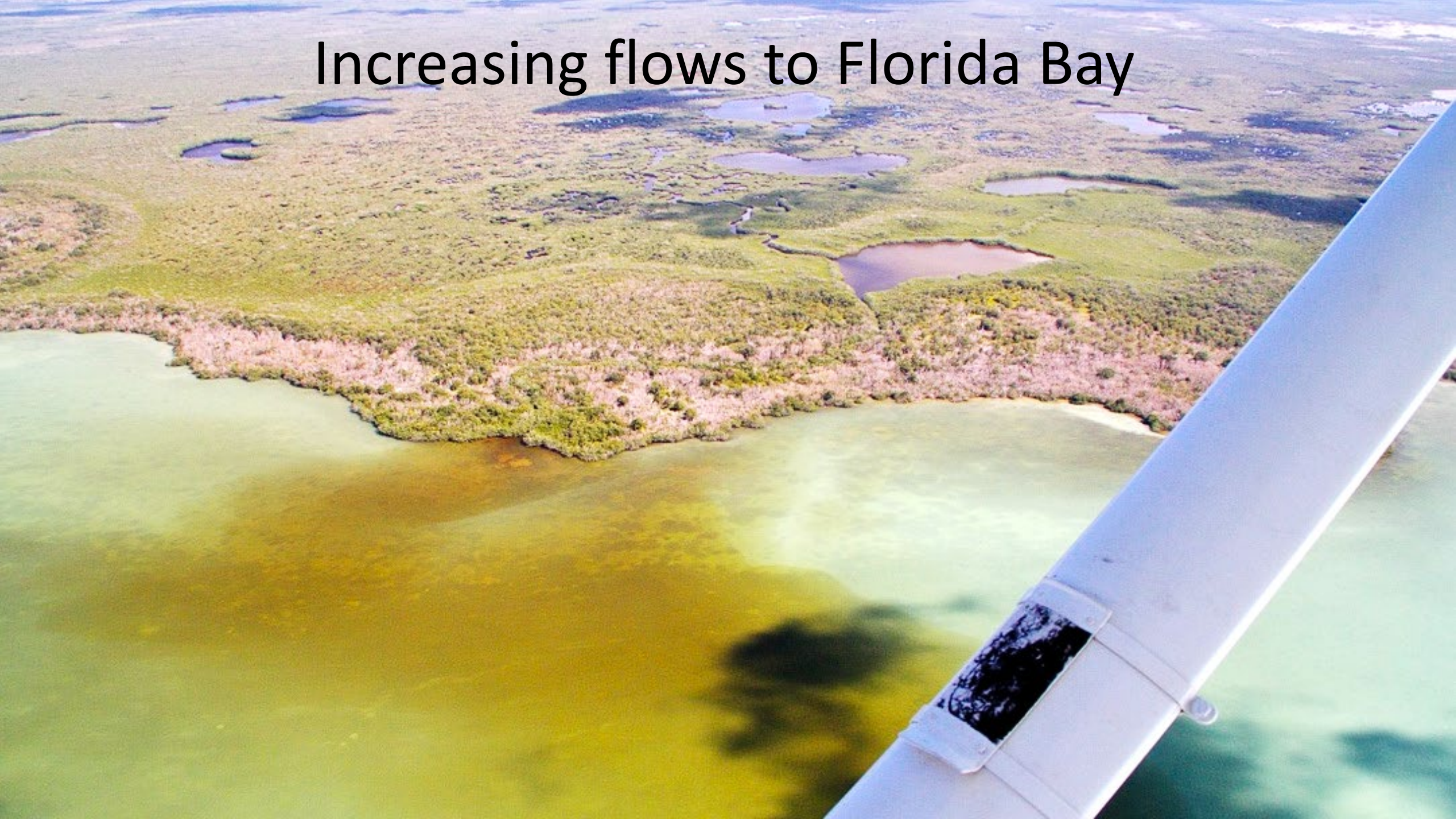
Improved Habitat Condition in Shark River Slough





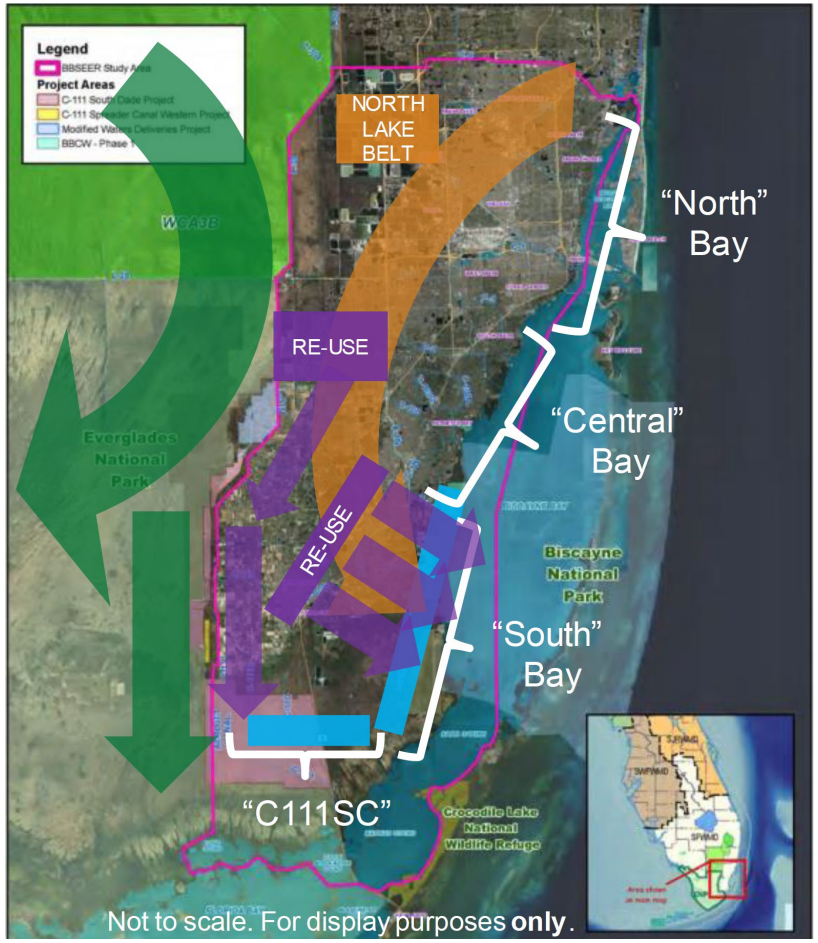


Increasing flows to Florida Bay



Biscayne Bay Southeastern Everglades Ecosystem Restoration (BBSEER)

- Redirecting water from North to South in Miami-Dade County
- First CERP study to incorporate sea level rise in planning
- Wetland resiliency incorporated as a performance metric
- Nearshore salinity, wetland salinity, and “Adaptive Foundational Resilience”



RESTORATION BUILDS RESILIENCE

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NOTE: Illustrations not to scale


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