



Everglades Restoration: Update on Progress and Activities

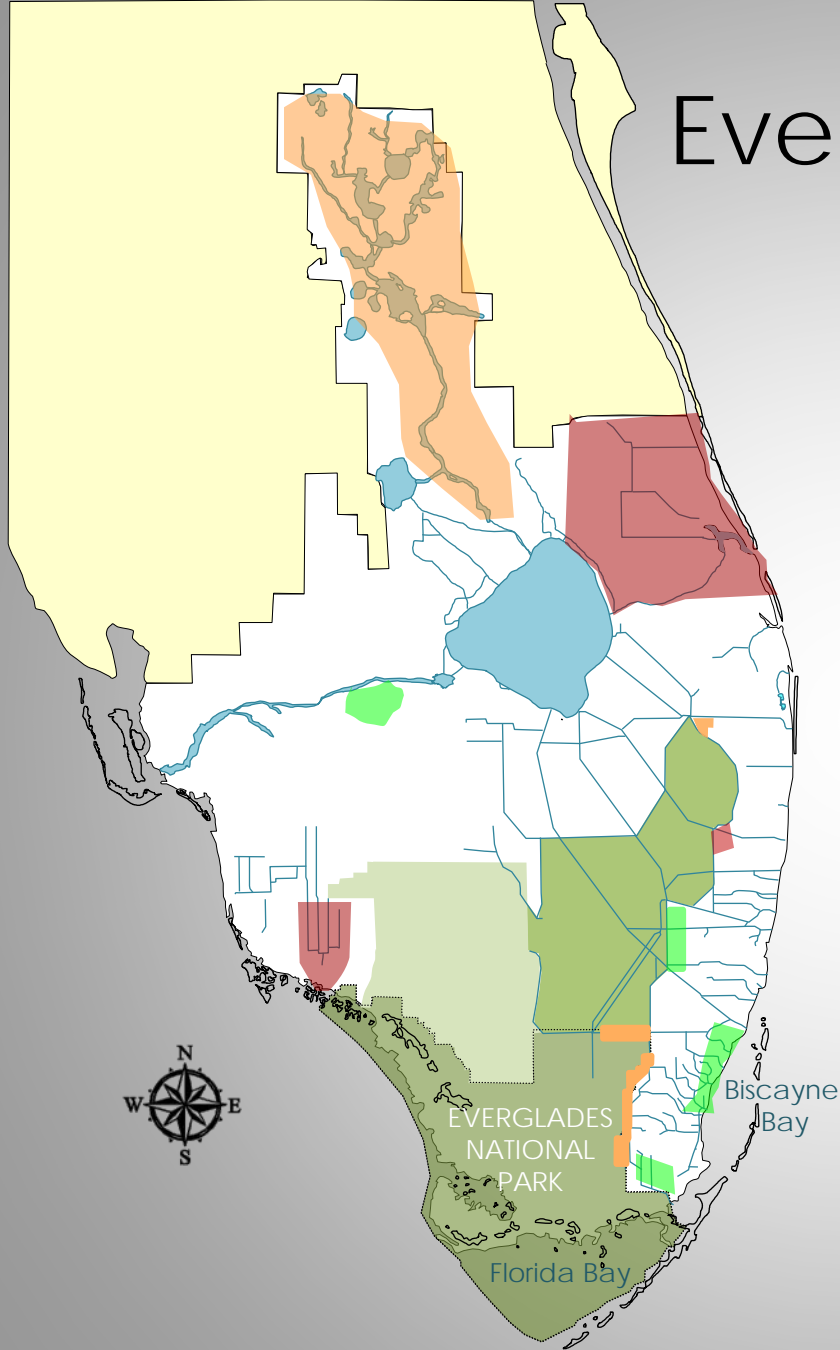
Florida Keys
National Marine
Sanctuary
Advisory Council

PRESENTED BY

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Director, Office of Everglades
Restoration Initiatives
U.S. Department of the Interior

December 10, 2013

Everglades Restoration



Foundation Projects

- ▶ Kissimmee River
- ▶ C-111 South Dade
- ▶ C-51/STA-1E
- ▶ Modified Water Deliveries

1st Generation CERP

- ▶ Site 1 Impoundment
- ▶ IRL-South
- ▶ Picayune Strand

2nd Generation CERP

- ▶ C-43 Reservoir
- ▶ Broward County WPA
- ▶ C-111 Spreader Canal
- ▶ Biscayne Bay Coastal Wetlands



October 3, 2012

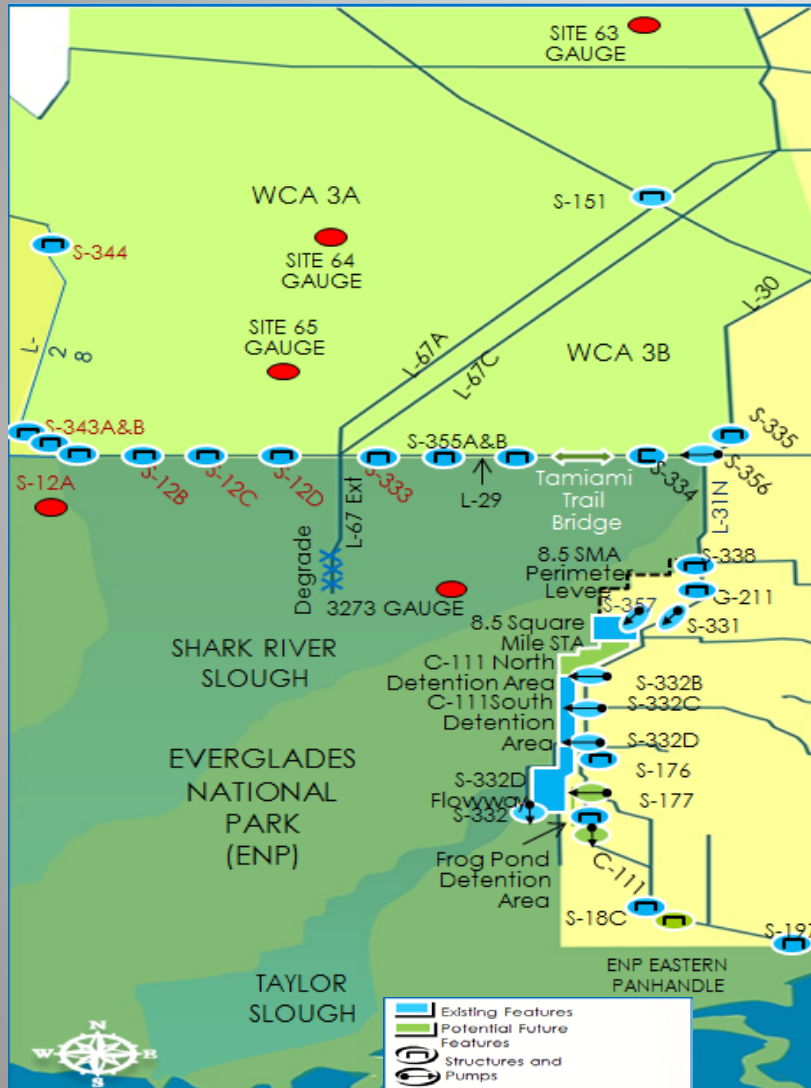
Kissimmee Restoration: Looking east at Phase II/III railroad bridge construction progress.



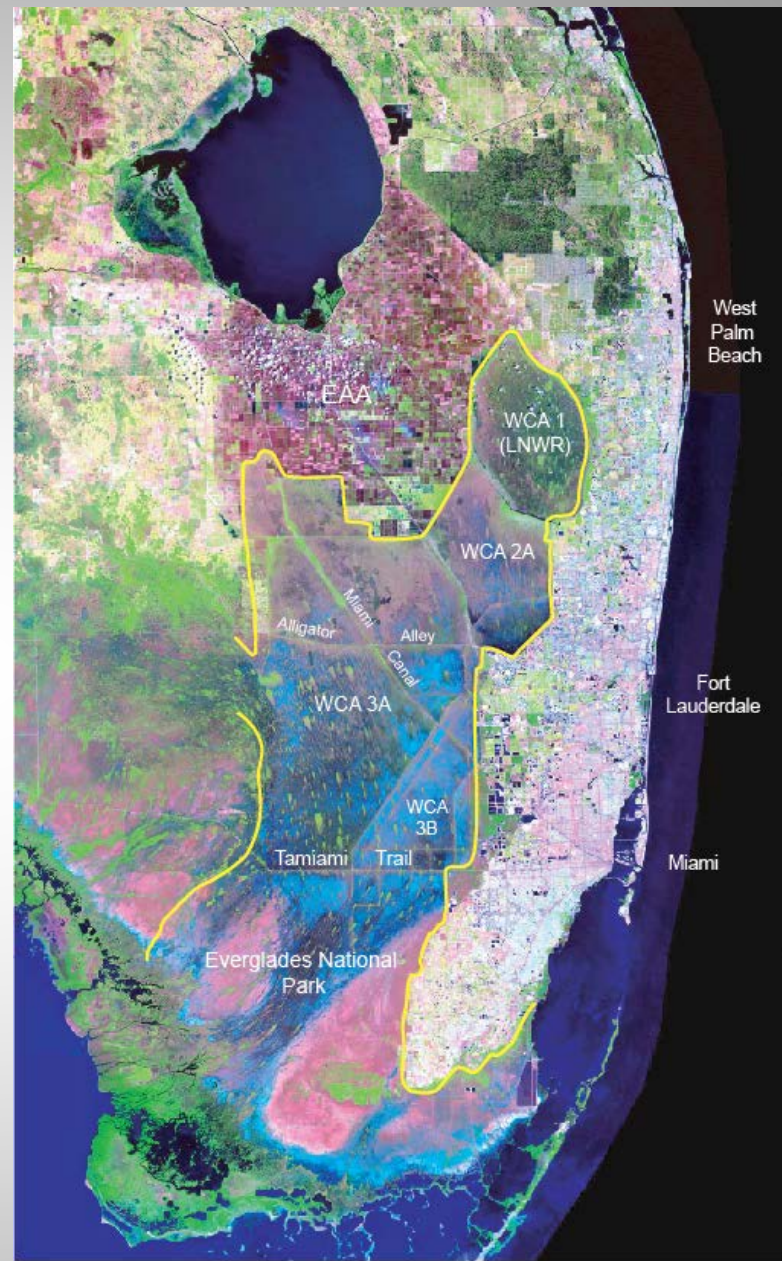
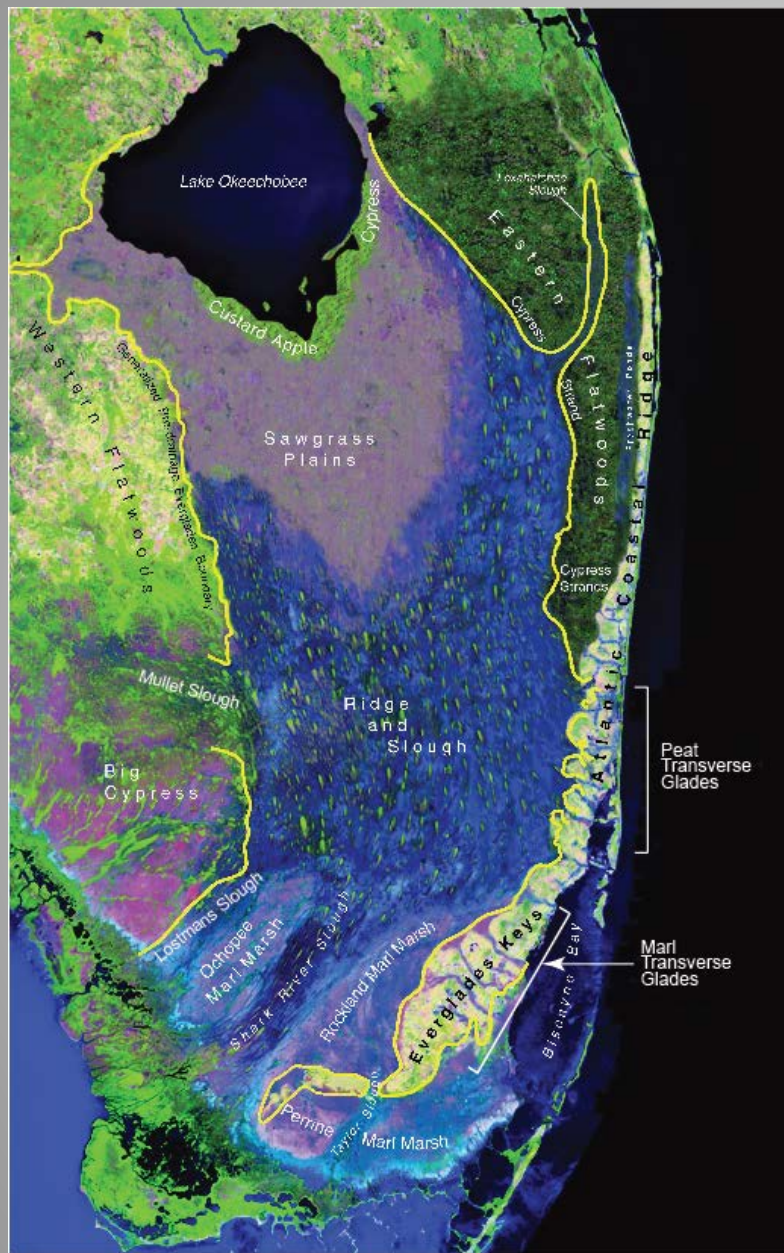
October 3, 2012

Kissimmee Restoration: Montsdeoca Run - Phase I restoration area

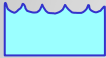
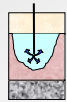
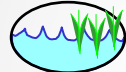

Steps to Complete Modified Waters and C-111 South Dade Projects

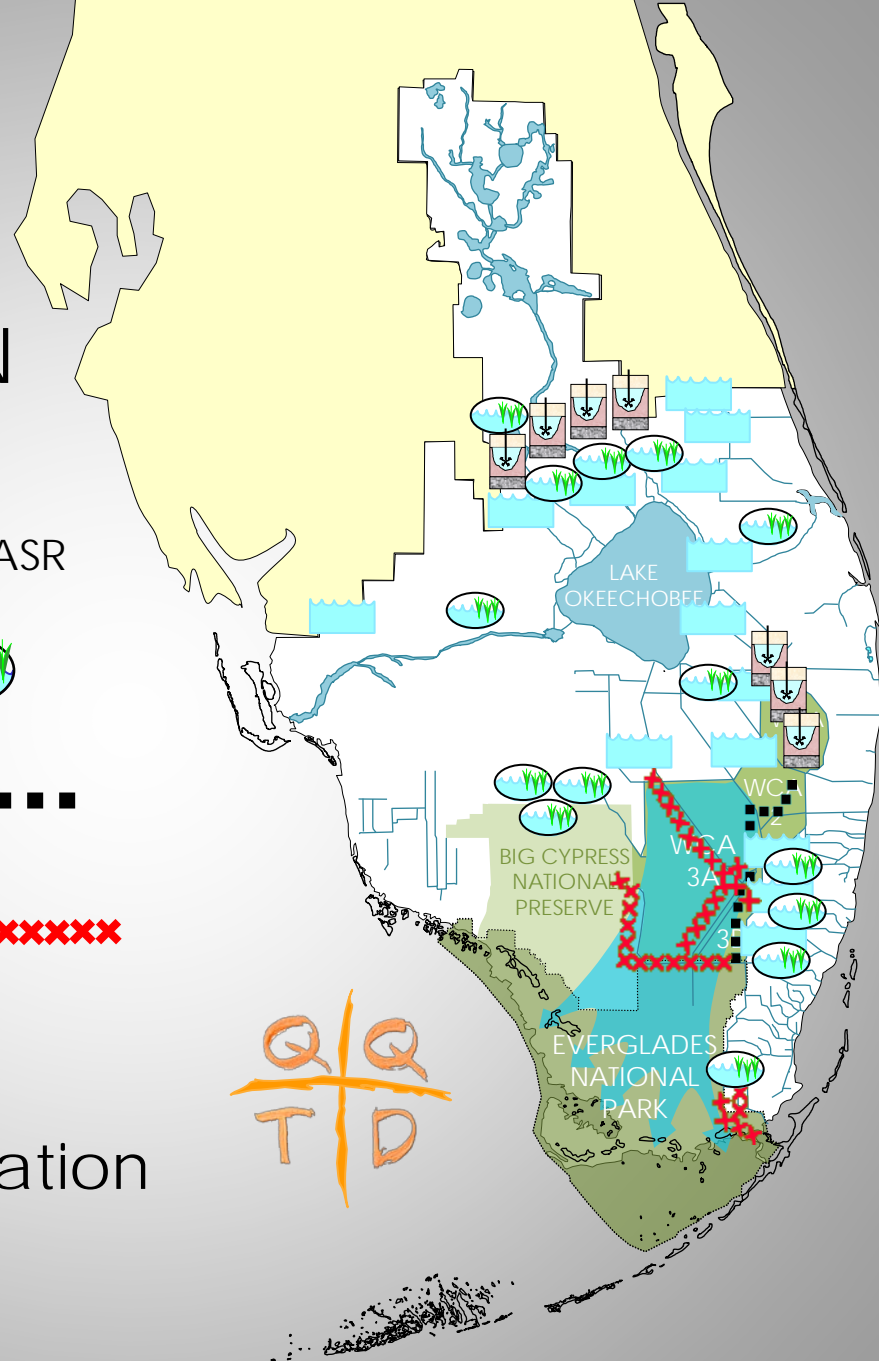


- G-3273 and S-356 operational testing
- Northern Detention Area and C-111 South Dade constructed (Contract 8)
- Combined operational plan for Modified Waters and C-111

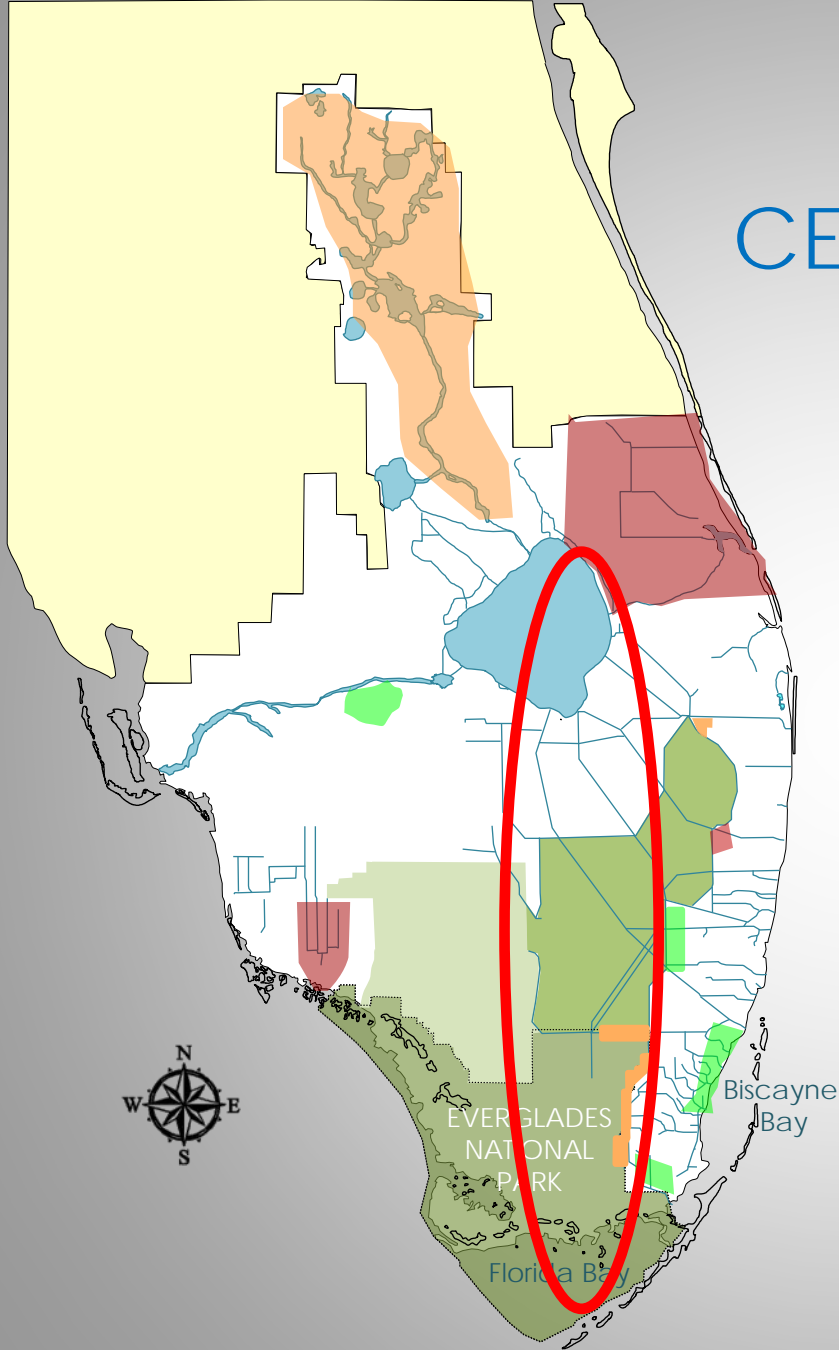


COMPREHENSIVE EVERGLADES RESTORATION PLAN

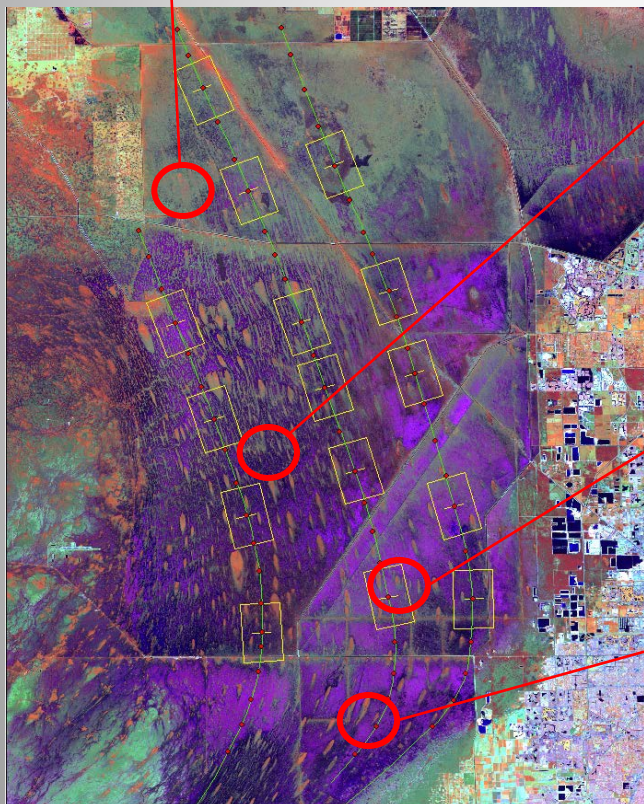
- 68 Components
 - ▶ Storage  Surface  ASR
 - ▶ STAs for water quality 
 - ▶ Seepage management ■■■■
 - ▶ Removing barriers to flow 
 - ▶ Revised operations
- 30+ year implementation



CENTRAL EVERGLADES



- Reduce undesirable discharges to east and west coast estuaries
- Deliver “new” sources of clean water to the Central Everglades and ENP
- Restore habitat in the central Everglades



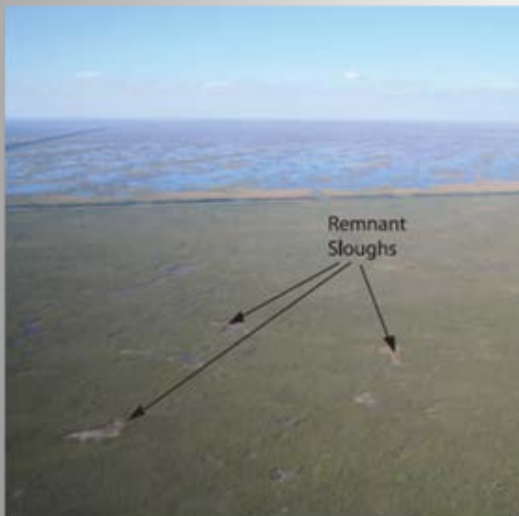
NORTHERN WCA 3A PROBLEMS TOO DRY, TOO OFTEN



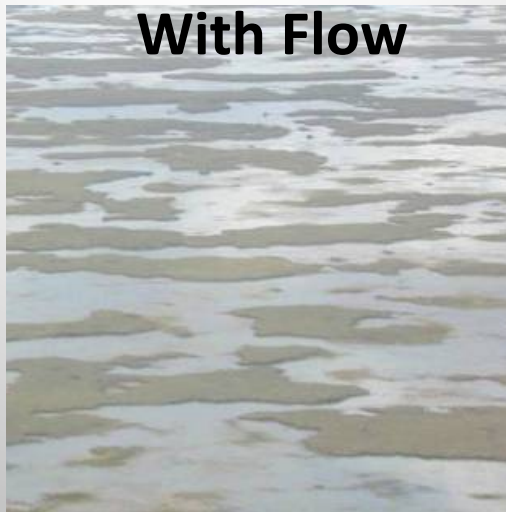
MIAMI CANAL IS AN UNNATURAL HABITAT



A RIVER THAT DOES NOT FLOW



With Flow

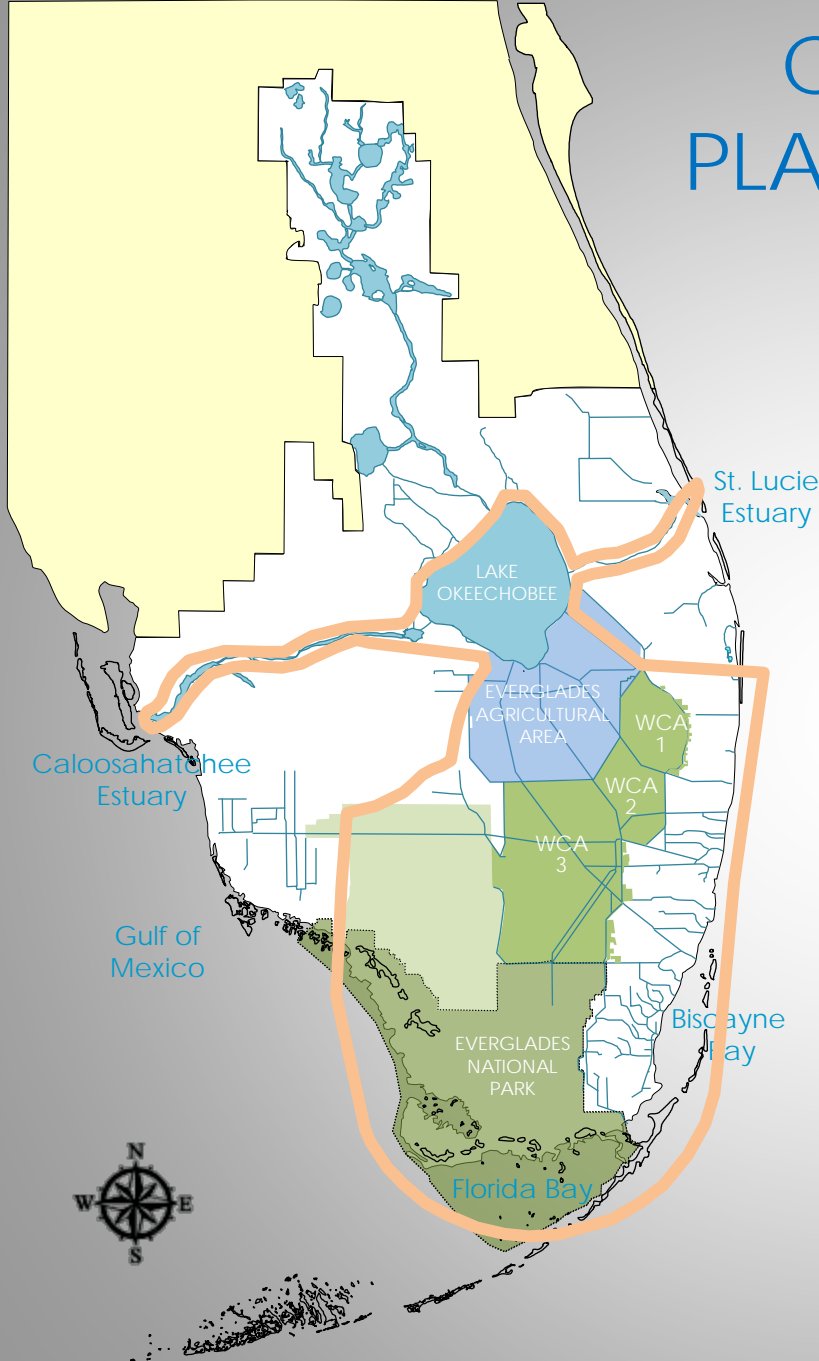


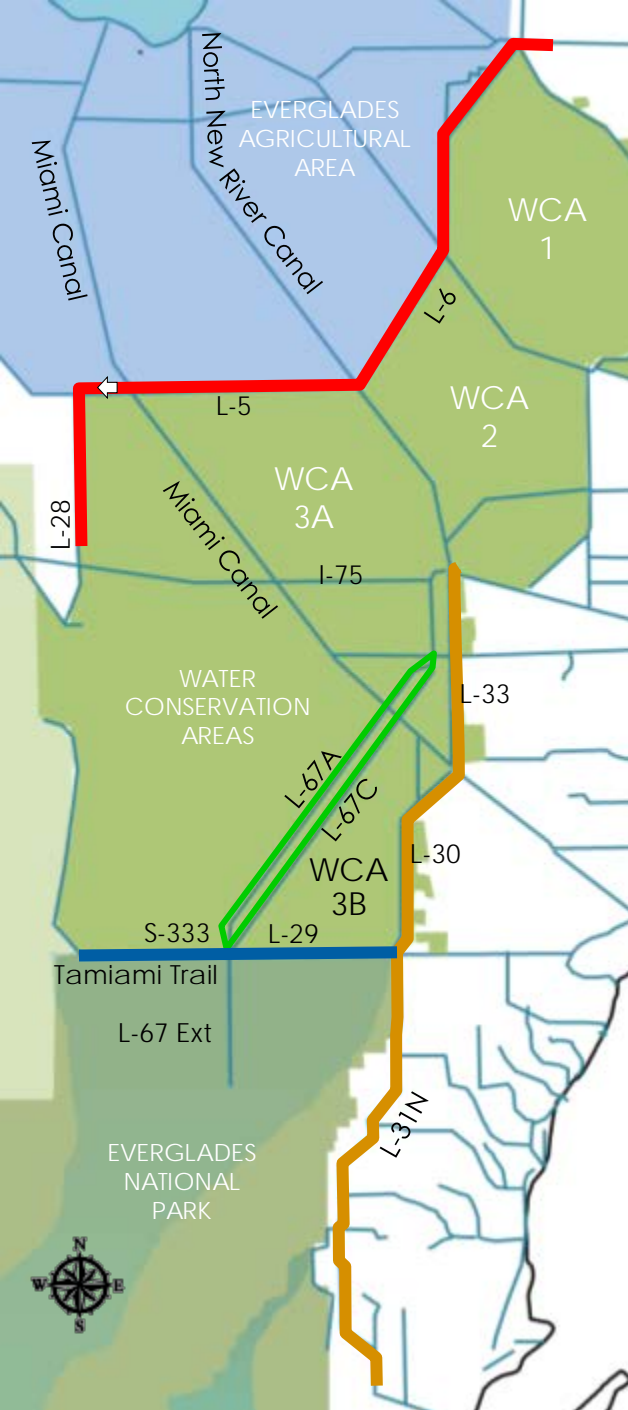
Without Flow



CENTRAL EVERGLADES PLANNING PROJECT (CEPP) PROPOSES TO:

- Move water south from Lake Okeechobee through Everglades Agricultural Area (EAA)
- Improve benefits to the Caloosahatchee and St Lucie estuaries
- Store and treat flows with proposed flowage equalization basin (FEB) in the EAA
- Send treated water south through Water Conservation Area 3A (WCA 3) and a flowway portion of 3B, and into Everglades National Park and Florida Bay





SPATIAL PERSPECTIVE

With CEPP planning terminology

North of the Redline

- Combination of features to increase water deliveries downstream and improve estuarine benefits

South of the Redline

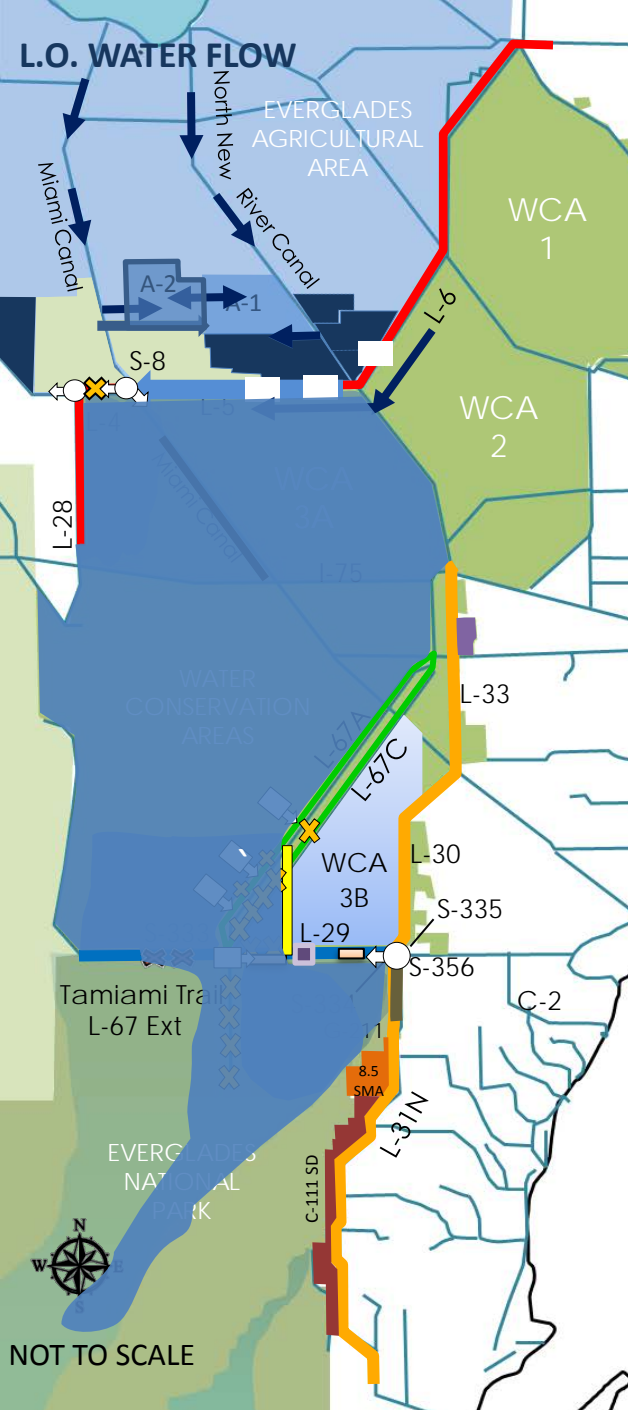
- Features and their locations to best restore sheetflow in northern Water Conservation Area 3A

Greenline/Blueline

- Features to best restore sheetflow through southern WCA-3A and 3B
- Configuration of conveyance features to best restore flows to Everglades National Park

Yellowline

- Features to best compliment rest of project and manage seepage to the eastern urban area without impacting the water supply



TENTATIVELY SELECTED PLAN (Alt 4R)

STORAGE AND TREATMENT

- Construct A-2 FEB and integrate with A-1 FEB operations
- Lake Okeechobee operation refinements within LORS

DISTRIBUTION/CONVEYANCE

- Diversion of L-6 flows, Infrastructure and L-5 canal improvements
- Remove western ~2.9 miles of L-4 levee (west of S-8 3,000 cfs capacity)
- 360 cfs pump station at western terminus of L-4 levee removal
- Backfill Miami Canal and Spoil Mound Removal ~1.5 miles south of S-8 to I-75

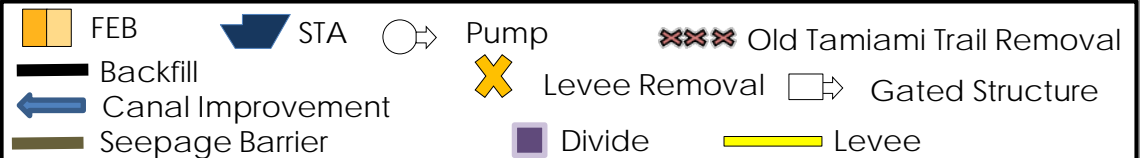
DISTRIBUTION/CONVEYANCE

- Increase S-333 capacity to 2,500 cfs
- Two 500 cfs gated structures in L-67A, 0.5 mile spoil removal west of L-67A canal north and south of structures
- Construct ~8.5 mile levee in WCA 3B, connecting L-67A to L-29
- Remove ~8 miles of L-67C levee in Blue Shanty flowway (no canal back fill)
- One 500 cfs gated structure north of Blue Shanty levee and 6,000-ft gap in L-67C levee
- Remove ~4.3 miles of L-29 levee in Blue Shanty flowway, divide structure east of Blue Shanty levee at terminus of western bridge
- Tamiami Trail western 2.6 mile bridge and L-29 canal max stage at 9.7 ft (FUTURE WORK BY OTHERS)
- Remove entire 5.5 miles L-67 Extension levee, backfill L-67 Extension canal
- Remove ~6 mile Old Tamiami Trail road (from L-67 Ext to Tram Rd)

SEEPAGE MANAGEMENT

- Increase S-356 pump station to ~1,000 cfs
- 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



Questions?

