

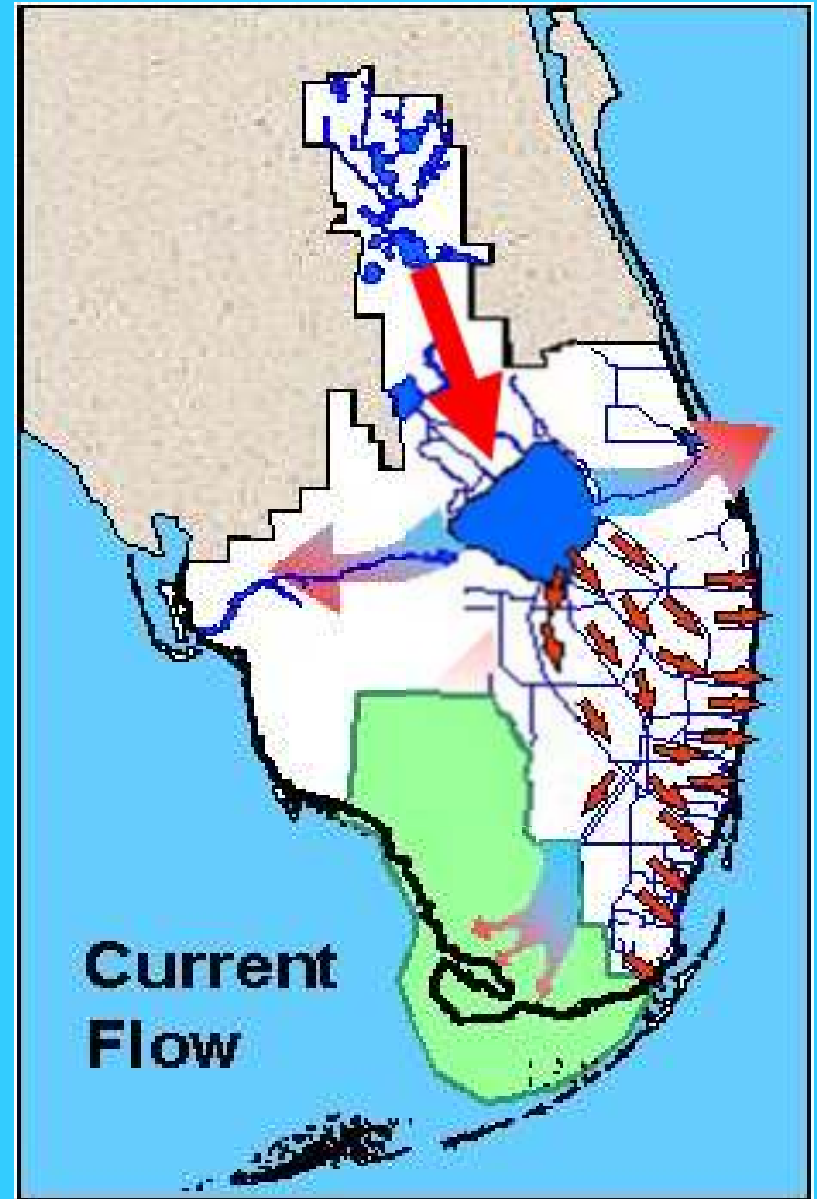
# Keeping the EAA Reservoir on Track: SB10 and Beyond

33<sup>rd</sup> Annual Everglades Coalition Conference

January 13, 2018

Mark Perry, Executive Director  
Florida Oceanographic Society





**1.7 Billion Gallons per Day to the Atlantic Ocean and Gulf of Mexico! (\$ 2.2 Billion/year)**



**Jan. 30 – Nov. 4 2016 Discharges**

**May – Dec 2017**

1,101 BG

From Lake Okeechobee to  
St. Lucie Estuary

Phosphorus - 135 MT  
Nitrogen – 1,247 MT  
TSS – 23,436 MT

219 BG

Lake  
Okeechobee

**134 BG**

518 BG

**347 BG**

48 BG

**7 BG**

From Lake Okeechobee to  
Caloosahatchee Estuary

Phosphorus - 195 MT  
Nitrogen – 2,673 MT  
TSS – 10,540 MT

100 BG

Agriculture  
Water Supply

**Everglades Agricultural Area  
(EAA) Runoff**

432 BG

**418 BG**

Provisional Data-Gary Goforth, Ph.D. 11-2-16



**Oyster Reefs**



**Seagrass Beds**



**Nearshore Coral Reefs**



## Environmental Impacts



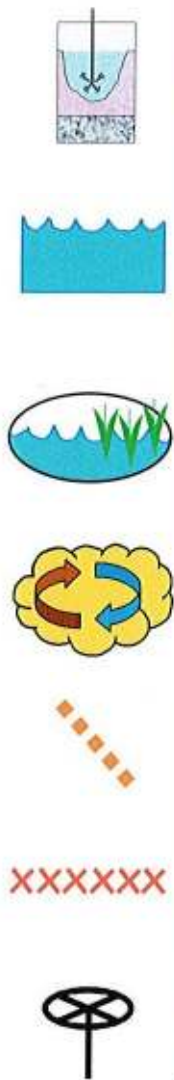
**Human Health Impacts**

**Economic Impacts**





# Comprehensive Everglades Restoration Plan (CERP) 68 Components /Projects



**Aquifer Storage & Recovery – 330 Wells**

**Surface Water Storage Reservoir – 170,000 acres**

**Stormwater Treatment Areas (STAs) – 36,000 acres**

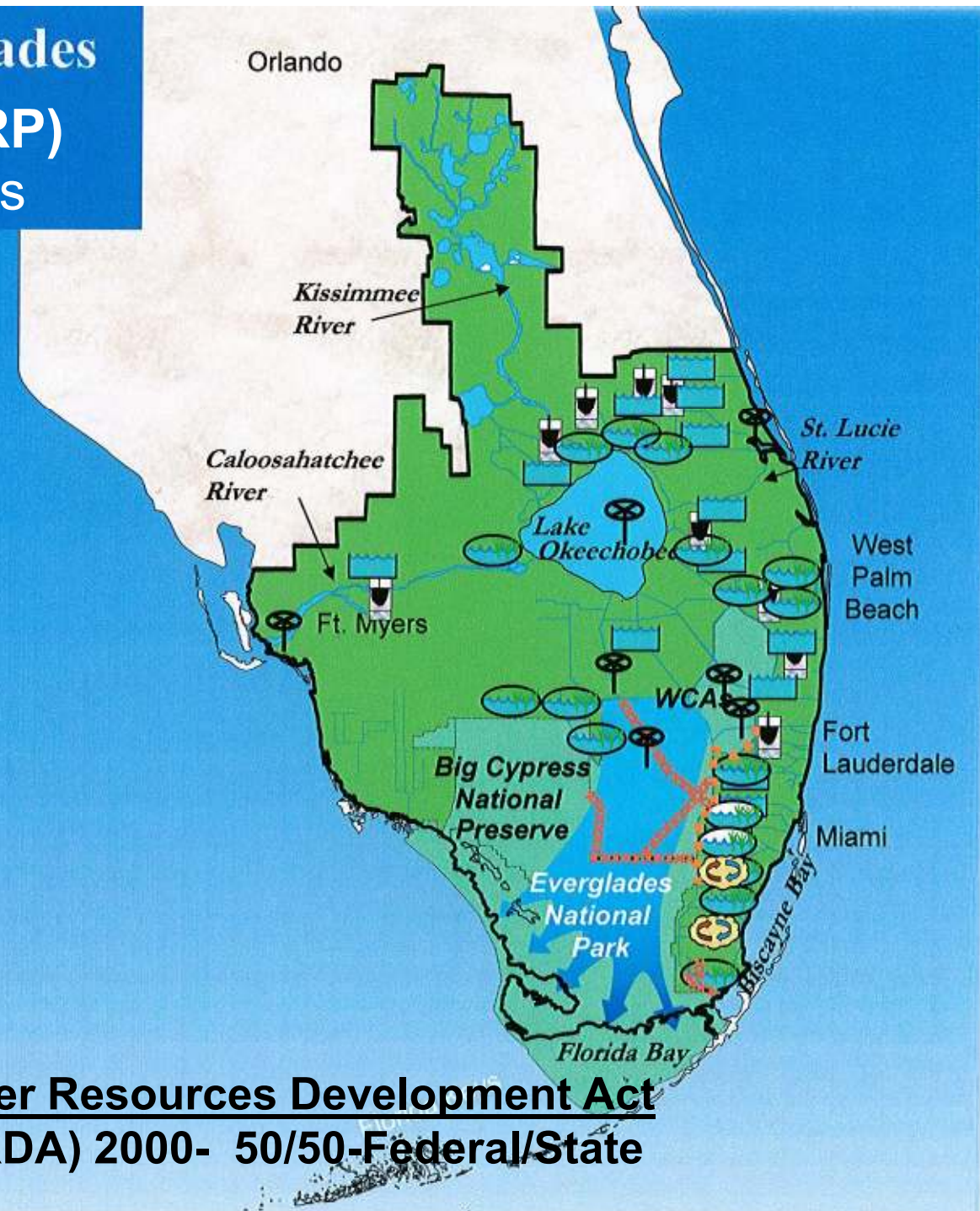
**Reuse Wastewater at 2 Regional Plants**

**Seepage Management**

**Removing 240 miles of Barriers to Sheetflow**

**Operational Changes**

**Water Resources Development Act (WRDA) 2000- 50/50-Federal/State**

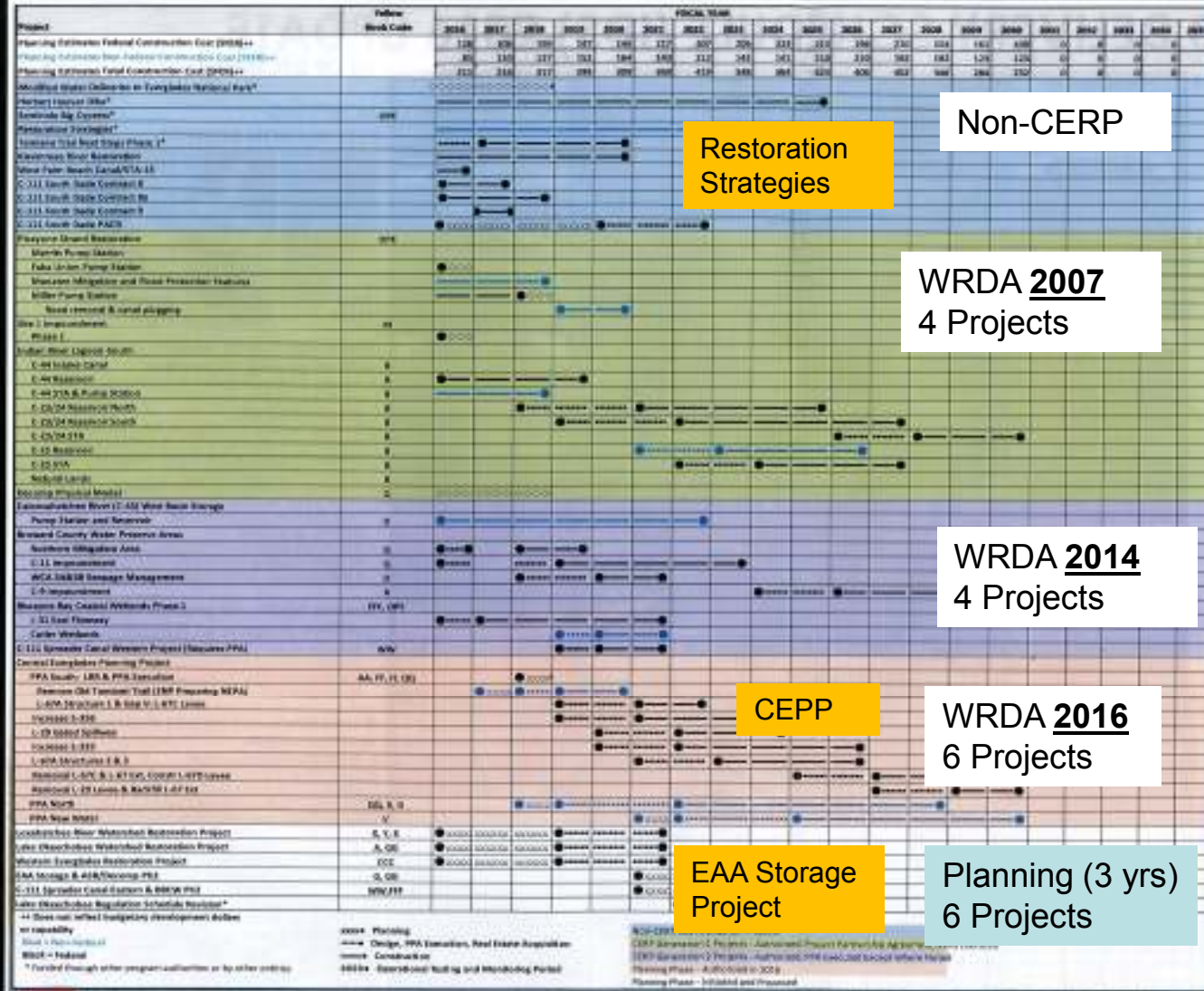




**INTEGRATED DELIVERY SCHEDULE (IDS) 2016 UPDATE AS OF DECEMBER 2016**

- Changes from the November 2015 IDS**
- Initiation of both the Lake Okechobee Watershed and Western Everglades Restoration planning studies one year earlier since funding and approval to initiate planning was obtained in FY16.
  - Flowline Road removal & Canal plugging construction moved to FY19 due to the need to have the Flood Control features completed and Congressional authorization of the Post Authorization Change Report for the increased total project costs.
  - Re-allocating Legacy Florida funding will become available in FY17. Construction of the Colocoshatchee River C-43 West Basin Storage will now be completed in FY22.
  - The Broward County Water Preserve Area project has been impacted due to no funding included in the USACE FY17 budget. The C-11 Impoundment now reflects design completion in FY18 and construction in FY19 through FY23.
  - Construction of the Biscayne Bay Coastal Wetlands Phase 1 - L-31 East Flowway was extended out to complete in FY21 due to limited design and construction funding in the USACE FY17 budget.
  - Planning for CEPP - PPA South: LRR & PPA Execution shifted from FY17 to FY18 due to no funding in the USACE FY17 budget.
  - Design and construction related to removing the Old Tamiami Trail and the L-67A Structure 1 & Gap in L-67C Levee contracts under CEPP shifted from FY18 to FY17 due to the requirement to complete an LRR before Plans and Specifications can begin. However, the USACE and the SFRWMD have executed a Pre-Partnership: Crediting Agreement to enable crediting to the SFRWMD to conduct the work.
  - The Hoover Dam Rehabilitation construction completion extended to FY25 to account for work approved in the Dam Safety Modification Report.

**NOTE:** The funding shown for FY17 and beyond is only national, representing approximate funding levels that would be needed to sustain the work displayed in the IDS for any particular FY. The funding does not represent a commitment by the Administration to budget the amounts shown.



Restoration Strategies

Non-CERP

WRDA 2007  
4 Projects

WRDA 2014  
4 Projects

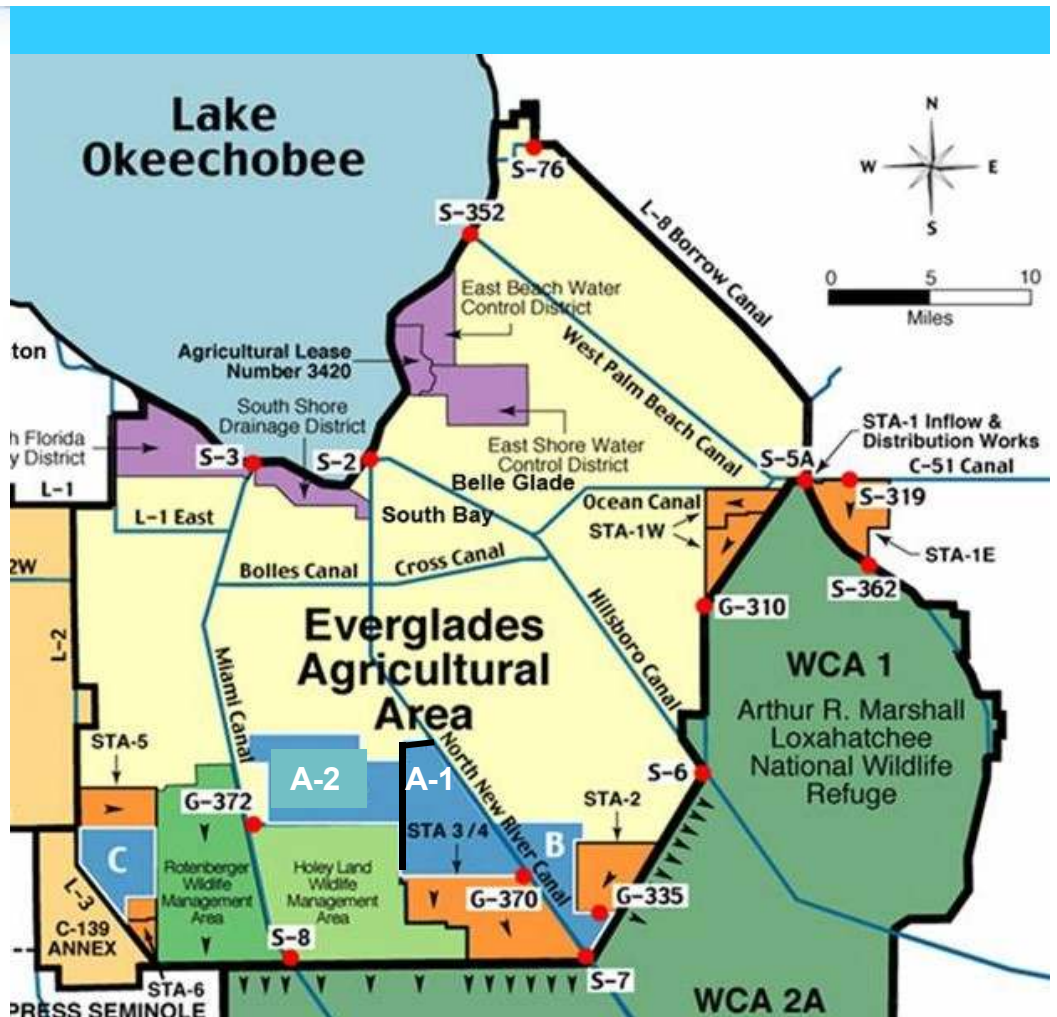
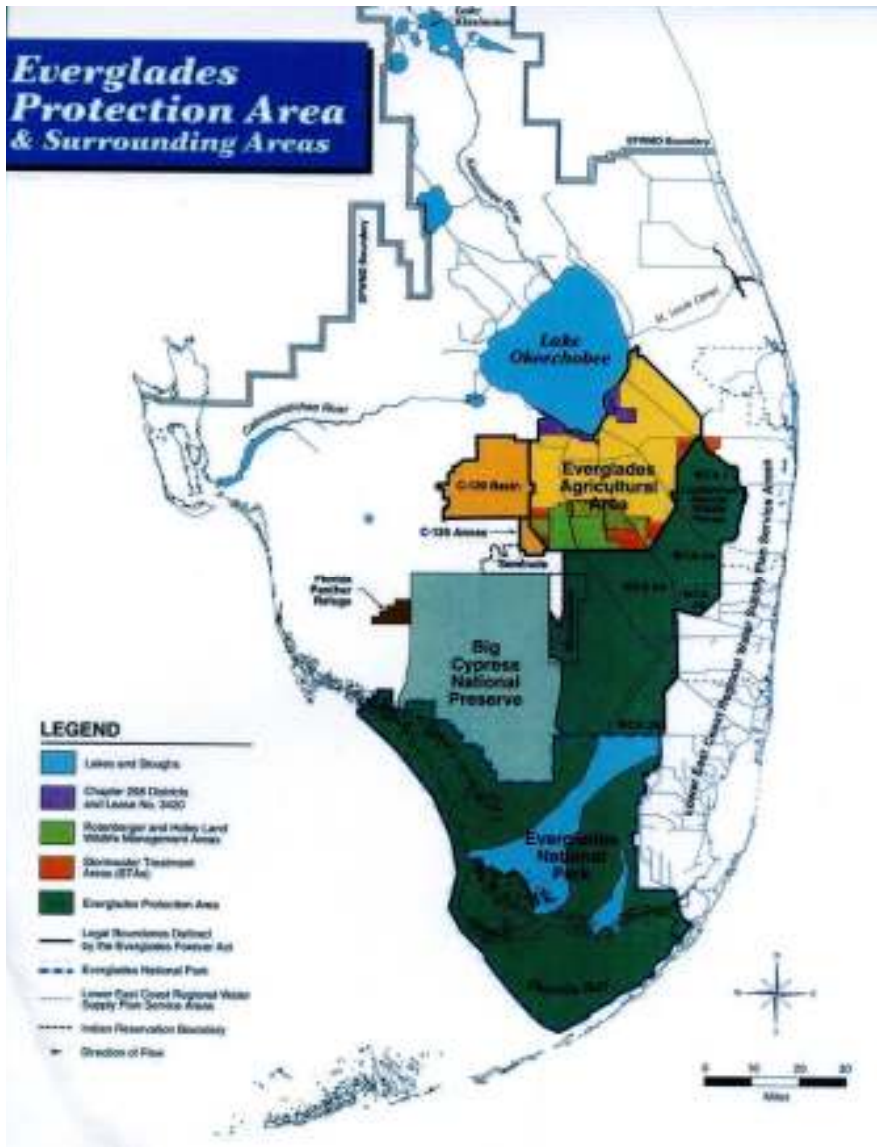
CEPP

WRDA 2016  
6 Projects

EAA Storage Project

Planning (3 yrs)  
6 Projects

**20-Year Schedule (2016 – 2035) 14 Projects- Federal/State**



**Everglades Forever Act (1994)**  
**Six Stormwater Treatment Areas (STAs)**  
**57,000 acres- \$ 1.2 Billion**

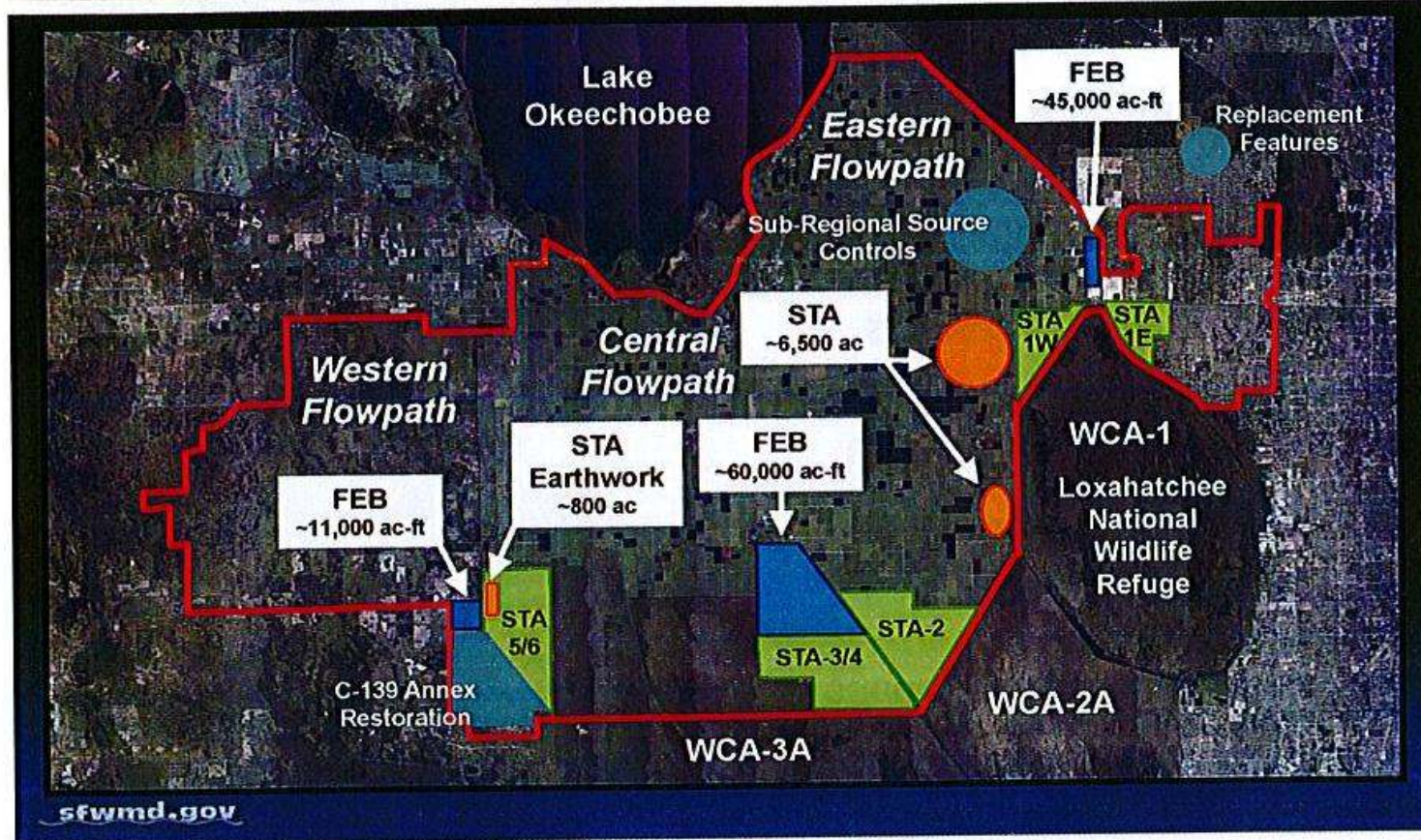
**Compartments A,B & C – State Lands Purchase- (1999) Talisman Properties- 60,000 acres – \$134 Million**

**Compartments B & C – Expand STAs 2&5/6**

**Compartments A-1 & A-2- EAA Reservoir Project - (Const. Start 2006)**



## Restoration Strategies – Key Projects



**“Restoration Strategies” Water Quality Treatment projects - \$ 880 Million – State of Florida – (May 28, 2013) A-1 now a Flow Equalization Basin (FEB) (Shallow Reservoir- 4 feet deep)**



# CENTRAL EVERGLADES PLANNING PROJECT



*Restoring the Heart of the Everglades*

## Central Everglades Planning Project (CEPP)

### Proposed Final Array of Alternatives

Kim Taplin, Chief  
Central Everglades Branch  
U.S. Army Corps of Engineers  
Jacksonville District

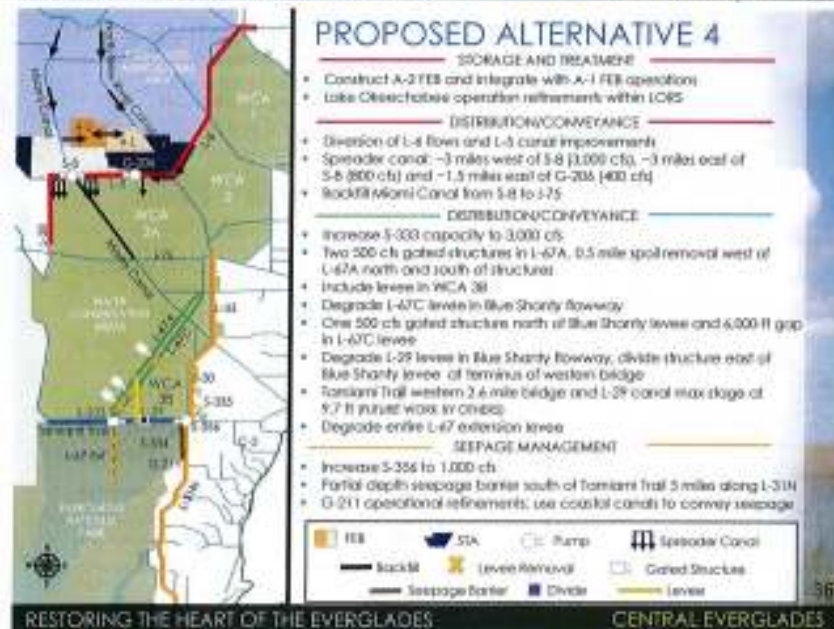
December 7, 2012

CENTRAL EVERGLADES



RESTORING THE HEART OF THE EVERGLADES

CENTRAL EVERGLADES

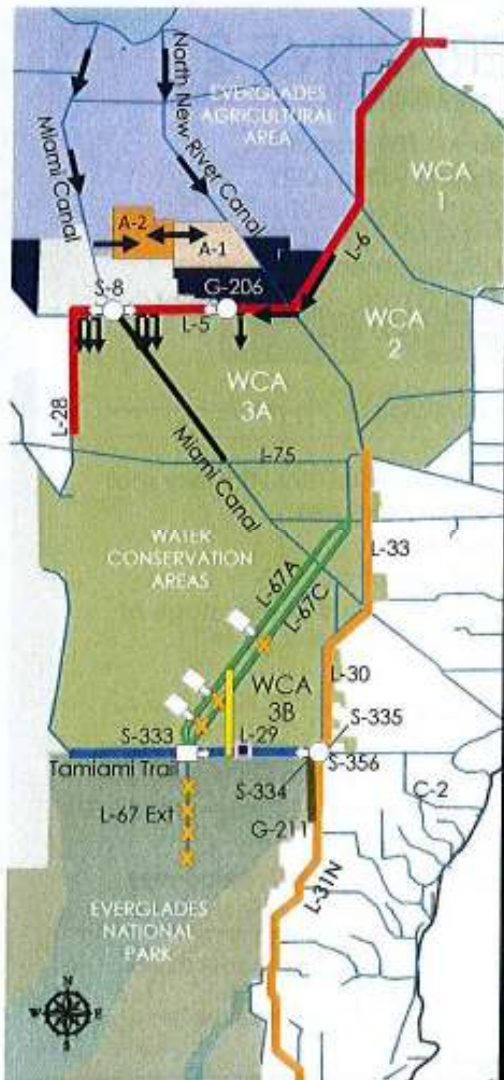


RESTORING THE HEART OF THE EVERGLADES

CENTRAL EVERGLADES

# Central Everglades Planning Project (CEPP) – Nov 2011 to Apr 2013





## PROPOSED ALTERNATIVE 4

### STORAGE AND TREATMENT

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

### DISTRIBUTION/CONVEYANCE

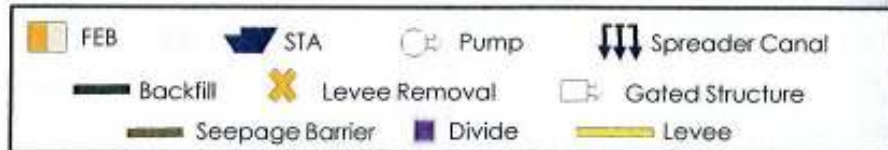
- Diversion of L-6 flows and L-5 canal improvements
- Spreader canal: ~3 miles west of S-8 (3,000 cfs), ~3 miles east of S-8 (800 cfs) and ~1.5 miles east of G-206 (400 cfs)
- Backfill Miami Canal from S-8 to I-75

### DISTRIBUTION/CONVEYANCE

- Increase S-333 capacity to 3,000 cfs
- Two 500 cfs gated structures in L-67A, 0.5 mile spoil removal west of L-67A north and south of structures
- Include levee in WCA 3B
- Degrade L-67C levee in Blue Shanty flowway
- One 500 cfs gated structure north of Blue Shanty levee and 6,000-ft gap in L-67C levee
- Degrade 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)
- Degrade entire L-67 extension levee

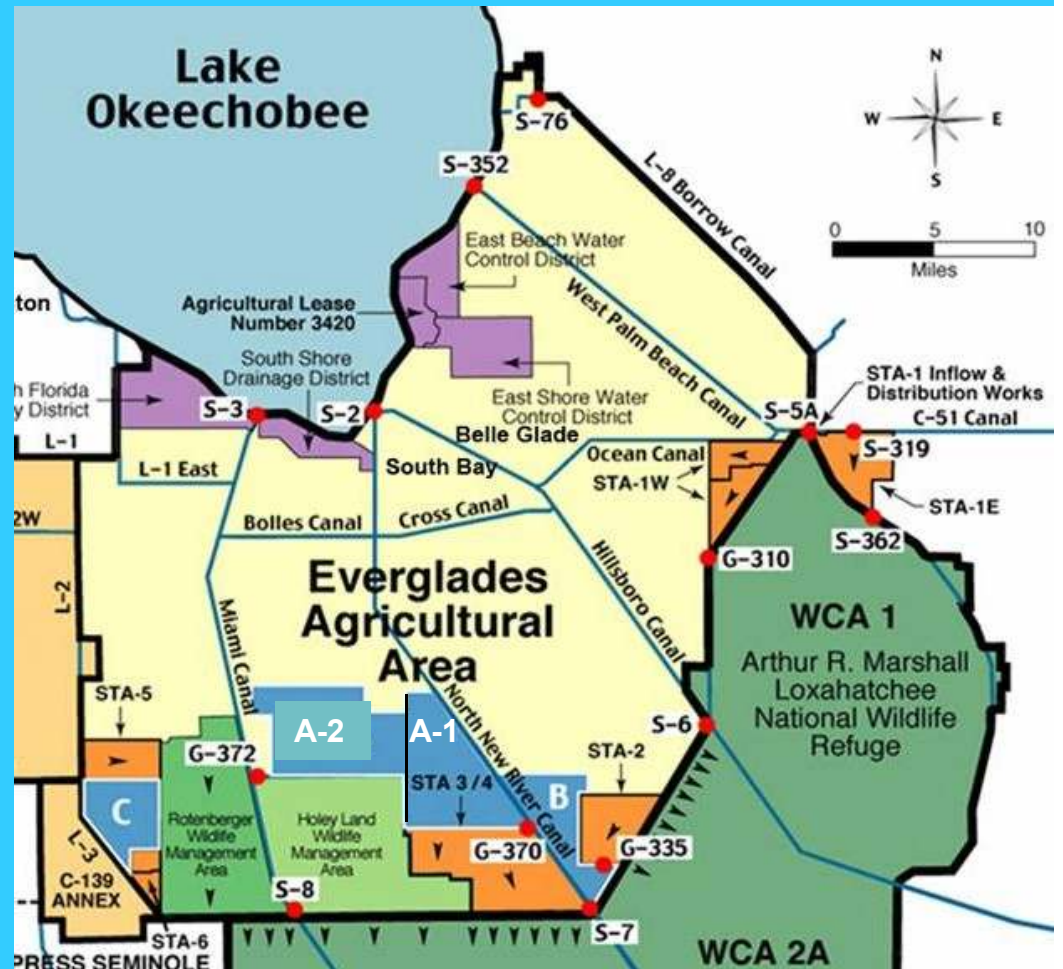
### SEEPAGE MANAGEMENT

- Increase S-356 to 1,000 cfs
- Partial depth seepage barrier south of Tamiami Trail 5 miles along L-31N
- G-211 operational refinements; use coastal canals to convey seepage



**Central Everglades Planning Project (including Restoration Strategies)  
A-1 & A-2 FEBs, Miami Canal, Tamiami Trail ...**





**A-1 now Restoration Strategies**  
**A-2 now Central Everglades Planning Project**

**Florida Senator Negron - August 2016- 60,000 acres (360,000 Acre Feet) for EAA Storage Project- Part of the Comprehensive Everglades Restoration Plan (CERP)**







**Governor Scott Signs  
SB 10-Ch 2017-10 FS  
EAA Storage Project-  
Clewiston, FL 5-12-17**

Provides for timeline to SFWMD & USACE complete planning, Funding FY 2018 \$30 M for acquiring land and leases, \$3M develop post-authorization change report. Also includes up to \$800 M in Florida Forever Bonding for land, planning and construction. \$64 M in FY 2019 for EAA Reservoir Project is also included in the bill.



### Project Goals and Objectives

- Reduce the high-volume freshwater discharges from Lake Okeechobee to the Northern Estuaries
- Restore hydrological connectivity to the Everglades
- Identify a project plan that adheres to the storage requirements and includes the necessary treatment and conveyance features south of Lake Okeechobee to increase flows to the Everglades system
- Be consistent with federal program and policy requirements to maintain eligibility for federal cost share



### Senate Bill 10

- Chapter 2017-10 Requirements regarding Post Authorization Change Report Development
- Engage landowners on a 'willing seller' basis
- 240,000 acre-feet of storage and necessary treatment on A-2 Parcel plus conveyance improvements
- 360,000 acre-feet of storage and necessary treatment on A-1 and A-2 Parcels plus conveyance improvements
- Report to Florida Legislature by Jan. 9, 2018
- Submit Post-Authorization Change Report to Congress for approval by Oct. 1, 2018

### Public Comment

**Email Address:**  
EAAreservoir@sfwmd.gov

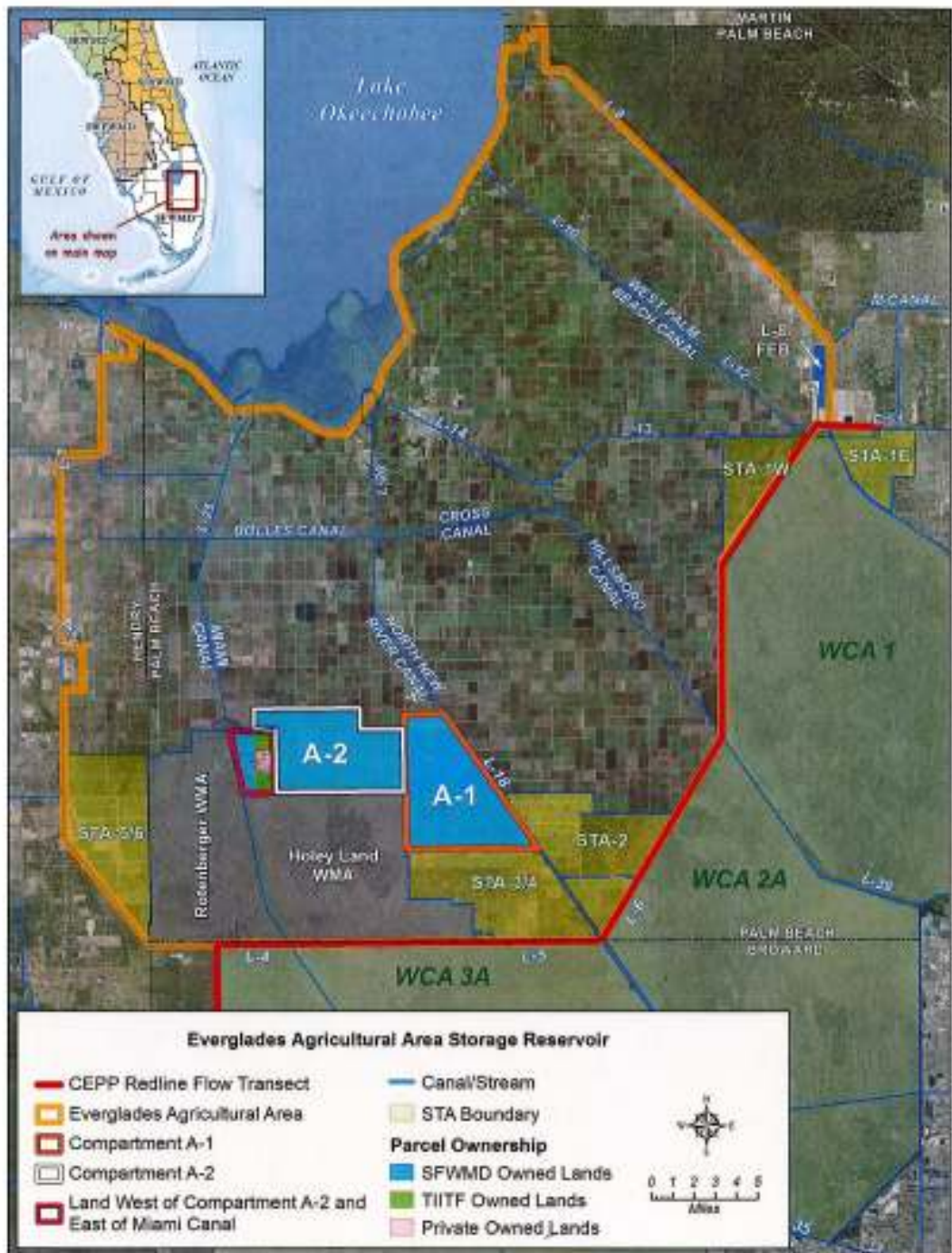
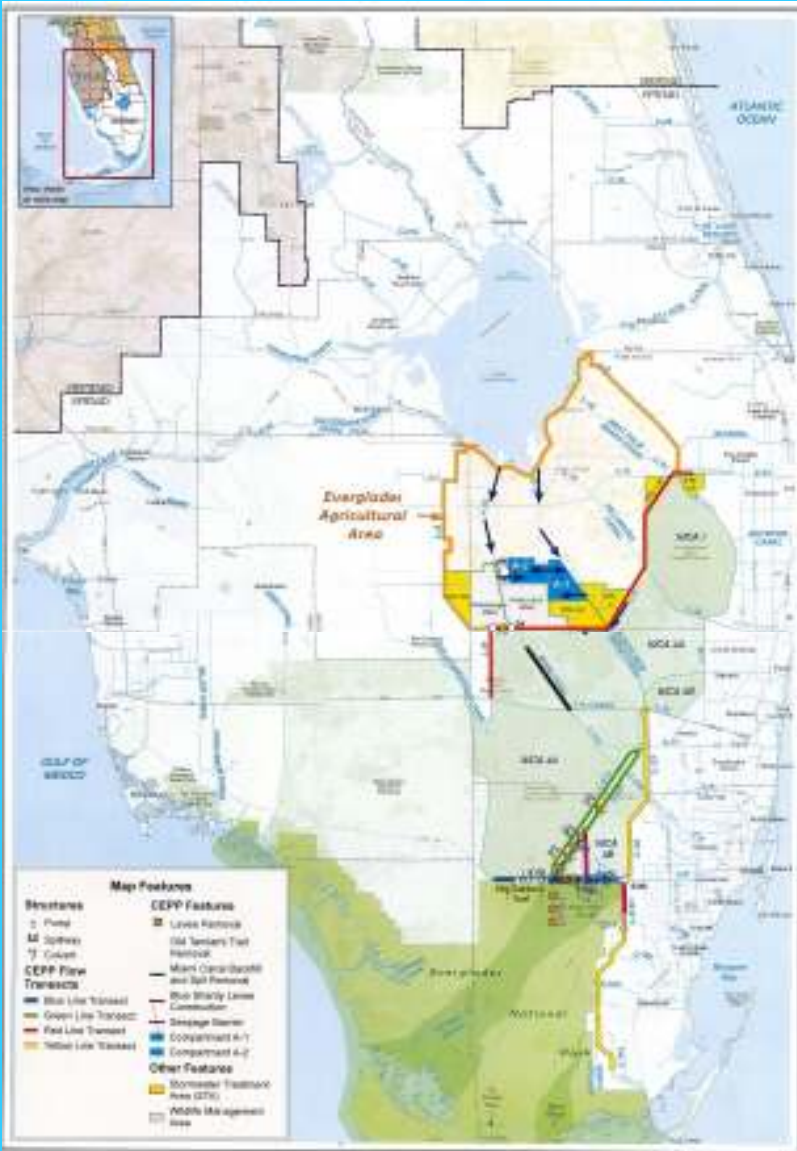
**Mailing address:**  
Mike Albert, Project Manager  
South Florida Water Management District  
3301 Gun Club Road, MSC 831J  
West Palm Beach, FL 33406

Scoping comment period ends November 22, 2017



**SFWMD Planning Process– May-August 2017 – Land owners, USACE October – December 2017 – Public Scoping Meetings**







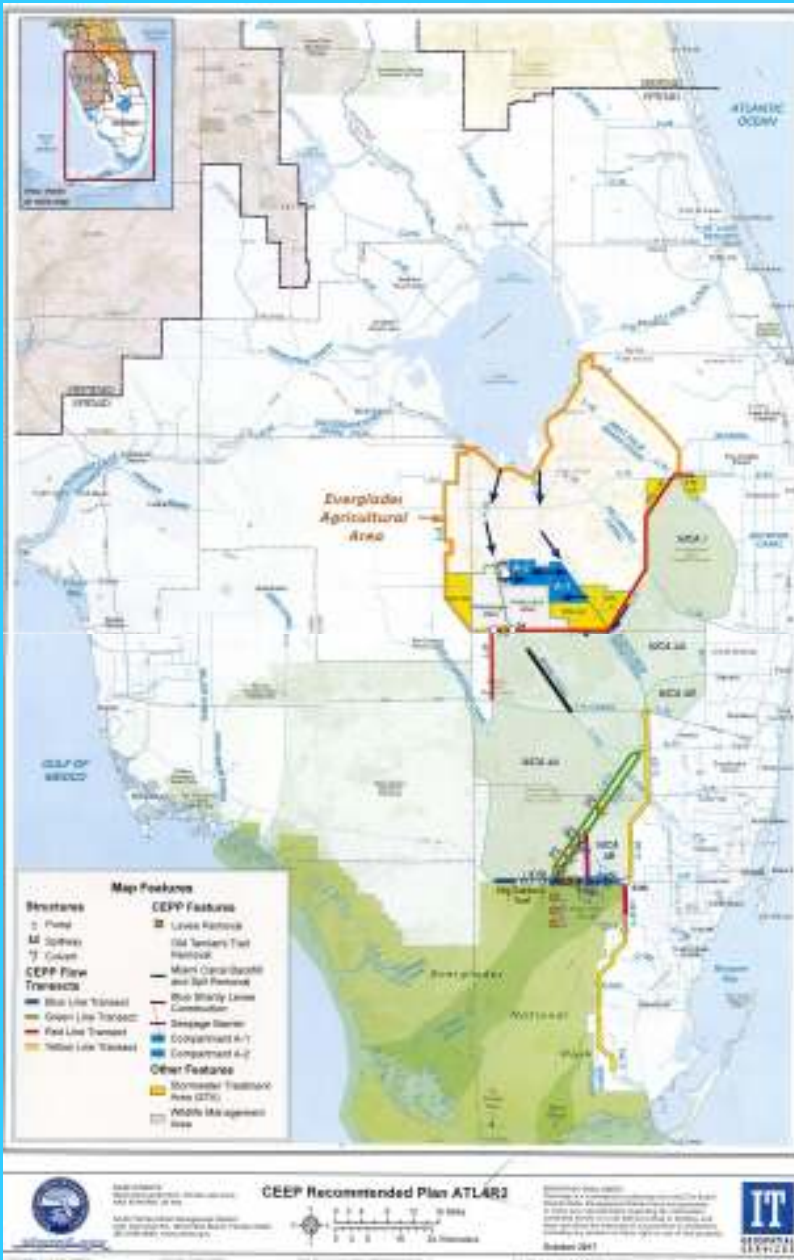


## Planning Process & Schedule

- **Section 203 of the Water Resources Development Act (WRDA) of 1986, as amended**
- **Key Activities and Target Dates:**
  - Update to Florida State Legislature - by January 9, 2018
  - Draft Report complete – by January 30, 2018
  - Final Report and submittal to Assistant Secretary of the Army for Civil Works – March 30, 2018
  - ASA(CW) submit report to Congress – October 1, 2018
  - Anticipated Congressional authorization – by December 31, 2019

**Everglades Agricultural Area Storage Reservoir Project**





SOUTH FLORIDA WATER MANAGEMENT DISTRICT

## Progress Report on SFWMD Implementation of Senate Bill 10 (Section 373.4598 Florida Statutes)

### INTRODUCTION

Senate Bill 10, approved by the Florida Legislature and signed into law by Governor Rick Scott in 2017, provided funding and direction to the South Florida Water Management District (SFWMD) to expedite planning, design and construction of the Everglades Agricultural Area (EAA) Storage Reservoir, an original component of the Comprehensive Everglades Restoration Plan (CERP) as approved by the U.S. Congress in 2000.

The goals of the EAA Storage Reservoir project are to significantly reduce the volume of damaging discharges from Lake Okechobee to the northern estuaries and provide additional water storage, treatment and conveyance south to the Everglades.

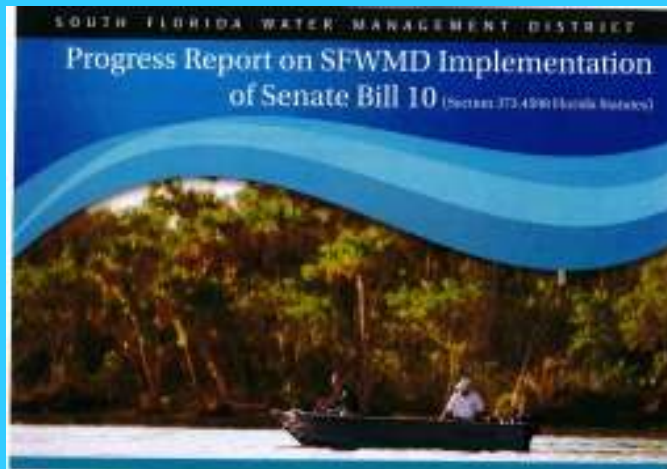
SFWMD is dedicated to planning, designing and constructing the EAA Storage Reservoir project. To date, SFWMD has developed alternatives that will reduce the number of discharge events from Lake Okechobee to the northern estuaries, in conjunction with authorized projects, by almost 60% while accomplishing

the goals and objectives defined in CERP, achieving state water quality standards and complying with state and federal laws. The alternatives are built on a foundation of sound scientific principles, data and modeling – such as those implemented successfully in Gov. Scott's Restoration Strategies plan – while making the best use of Florida taxpayer dollars on lands identified by the Legislature.

SFWMD has made real progress in advancing this important project and remains on track to deliver this study to the U.S. Army Corps of Engineers by March 30, 2018. Delivery would provide six months for review and submission to the U.S. Congress by the Office of the Assistant Secretary of the Army for Civil Works. Therefore, SFWMD does not believe an extension of time is necessary. This summary document reflects the hard work completed to date and fulfills the reporting requirements set by the Legislature in 2017.

## SFWMD Progress Report to the Florida Legislature- January 9, 2018





## INTRODUCTION

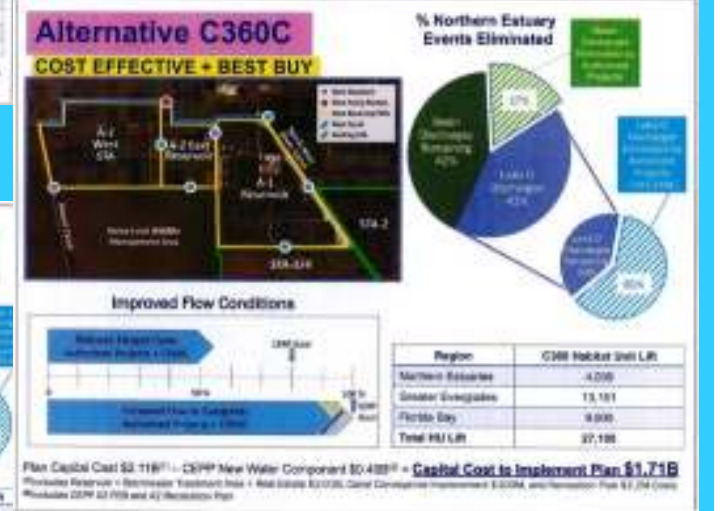
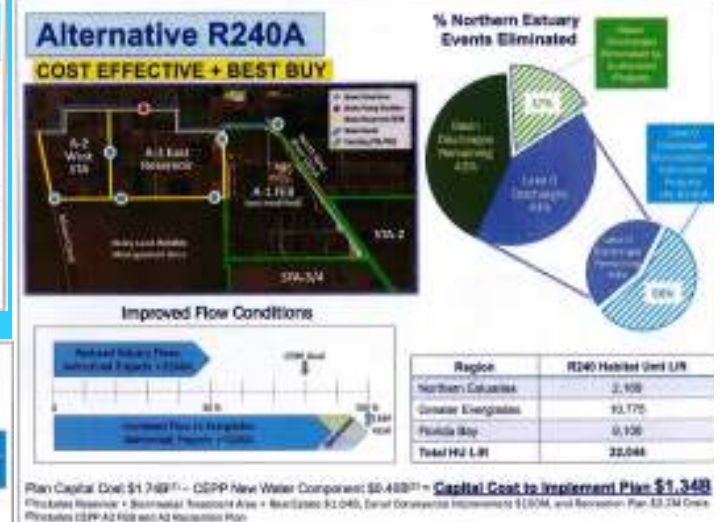
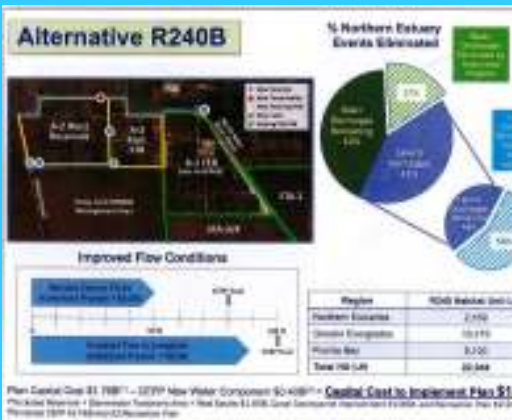
Senate Bill 10, approved by the Florida Legislature and signed into law by Governor Rick Scott in 2011, awarded funding and direction to the South Florida Water Management District (SFWMD) to expedite planning, design and construction of the Everglades Agricultural Area (EAA) Storage Reservoir, an original component of the Comprehensive Everglades Restoration Plan (CERP) as approved by the U.S. Congress in 2000.

The goals of the EAA Storage Reservoir project are to significantly reduce the volume of damaging discharges from Lake Okechobee to the northern Everglades and provide additional water storage, treatment and conveyance to the Everglades.

SFWMD is dedicated to planning, designing and constructing the EAA Storage Reservoir project. To date, SFWMD has developed alternatives that will reduce the number of discharge events from Lake Okechobee to the northern Everglades, in conjunction with authorized projects, by about 60% while accomplishing

intergoal and objectives defined in CERP, achieving state water quality standards and complying with state and federal laws. The alternatives are built on a foundation of sound scientific principles, data and modeling – such as those implemented successfully in Gov. Scott's Restoration Strategies plan – while making the best use of Florida taxpayer dollars on lands identified by the Legislature.

SFWMD has made real progress in addressing this important project and remains on track to deliver this study in the U.S. Army Corps of Engineers by March 30, 2018. Delivery will provide six months for review and submission to the U.S. Congress by the Office of the Assistant Secretary of the Army for Civil Works, Tallahassee. SFWMD does not believe an extension of time is necessary. This summary document reflects the hard work completed to date and fulfills the reporting requirements set by the Legislature in 2017.

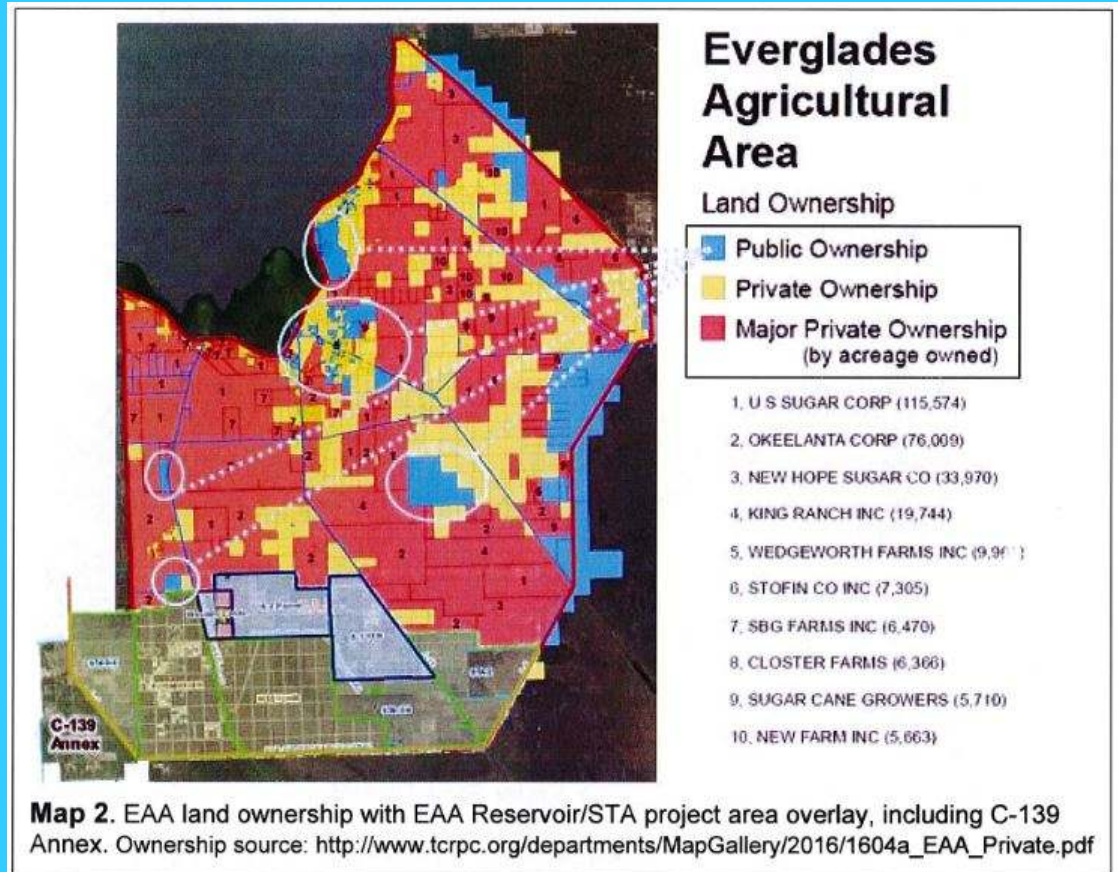
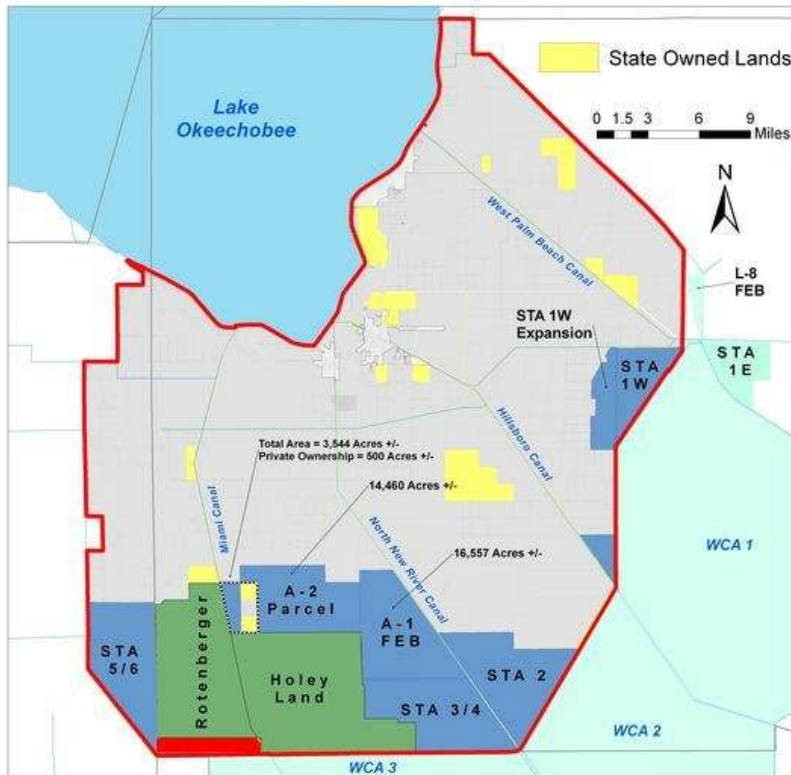


# SFWMD Progress Report 5 Alternatives ??

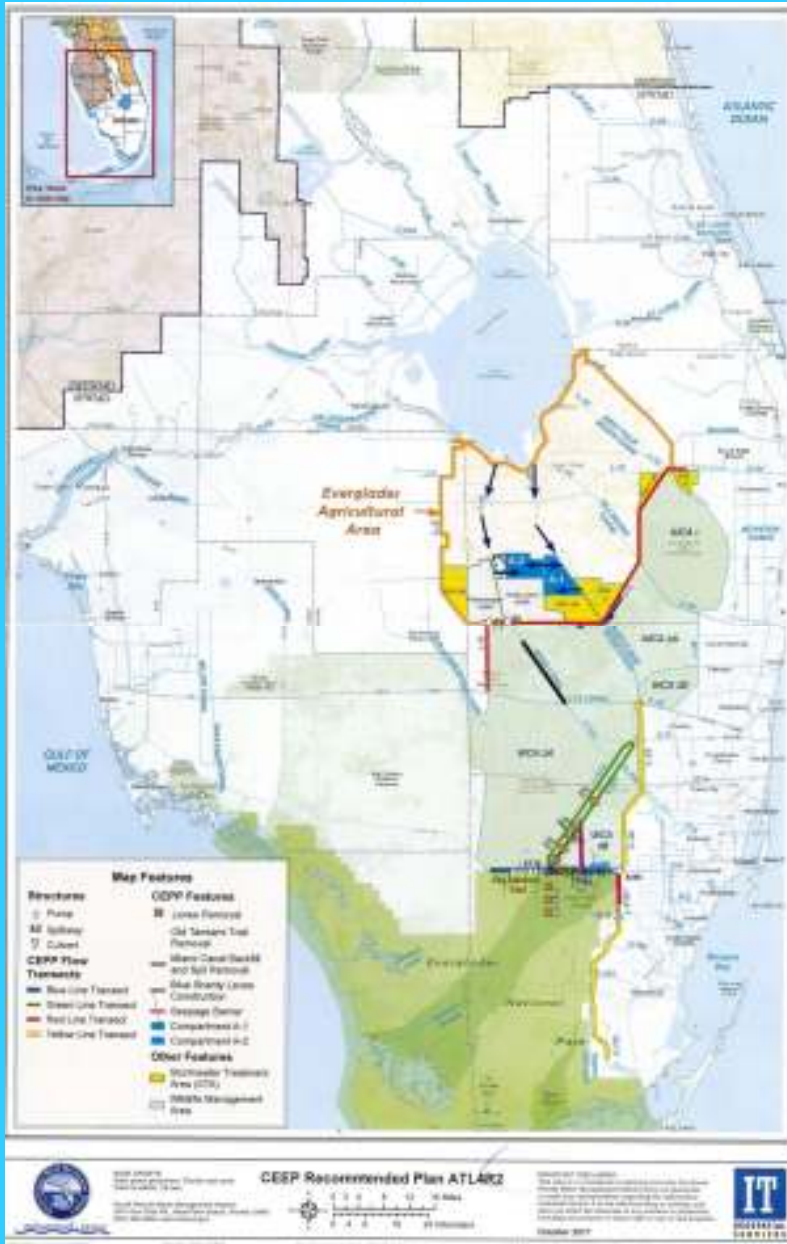
# Reservoirs & STAs all within the A-1/A-2 Footprint ??



## Everglades Agricultural Area (EAA) Land Ownership 2014



**Public Lands in the Everglades Agricultural Area (EAA) ??**



# SB10 and Beyond ??