

# SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

SFER Working Group / Science Coordination Group  
(WG/SCG)

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U.S. Army Corps of Engineers, Jacksonville District

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# **SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM**

## **Purpose and Agenda**

The purpose of this briefing is to provide participants with an overview and update on the status of the South Florida Ecosystem Restoration (SFER) program and projects.

### **Agenda:**

- 1) Program Overview
- 2) Project Status
- 3) FY20 Budget Review
- 4) Key Take Aways



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## Program Overview



- Large-scale, watershed project area (Over 18,000 square miles), including Everglades & Dry Tortugas National Park, Biscayne National Park, Big Cypress National Preserve, Arthur R. Marshall Loxahatchee National Wildlife Refuge, and other Federal Lands
- Everglades National Park is an International Biosphere Reserve, a World Heritage Site, and a Ramsar Wetland of International Importance
- Improve the health of over 2.4 million acres of south Florida ecosystem, including Lake Okeechobee
- Flood Risk Management and Water Supply for over 8 Million residents; the largest metropolitan area in the southeastern U.S. in the 3rd largest state
- 70 Federally-listed threatened and endangered species
- Robust agricultural, recreational, and tourism industries

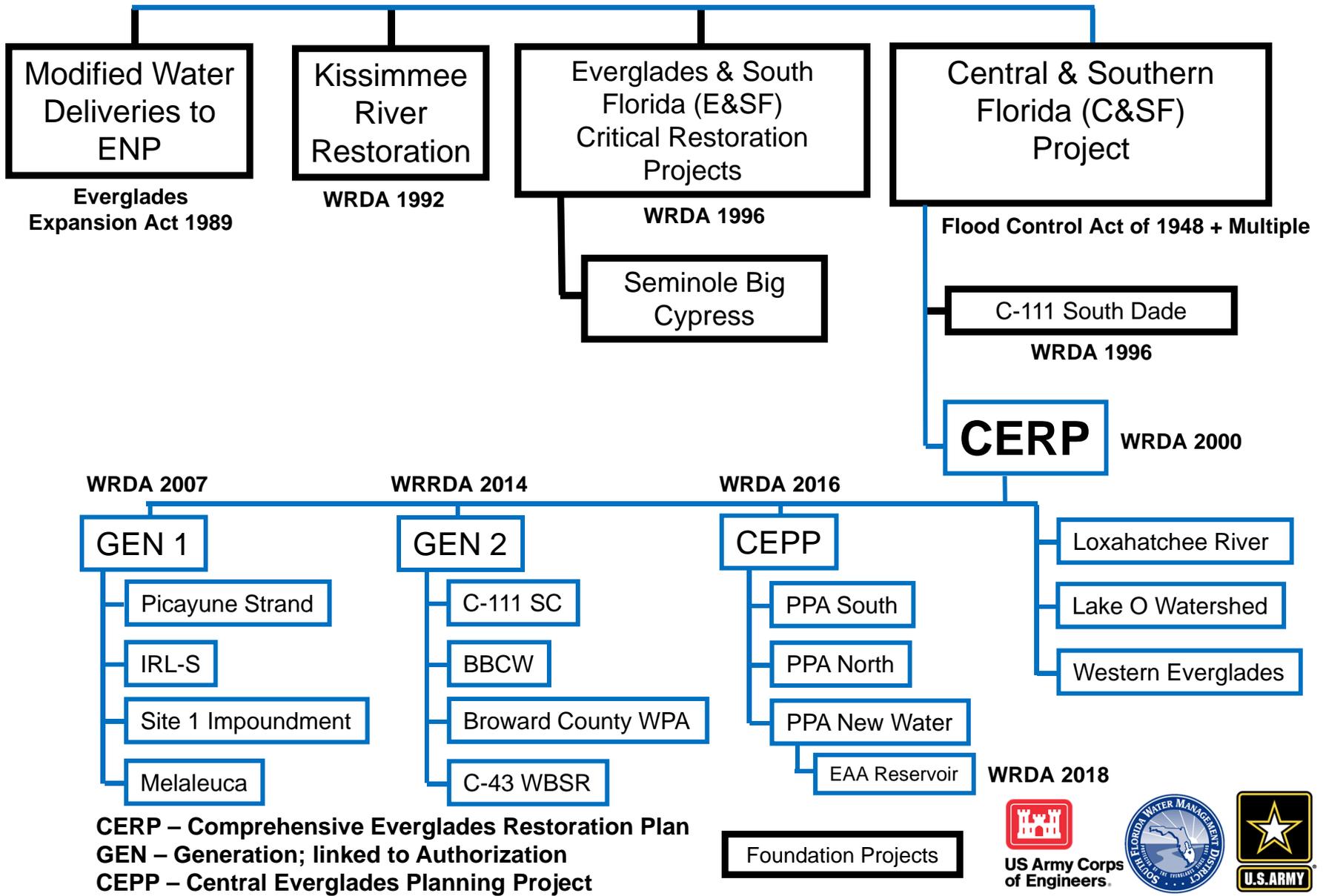


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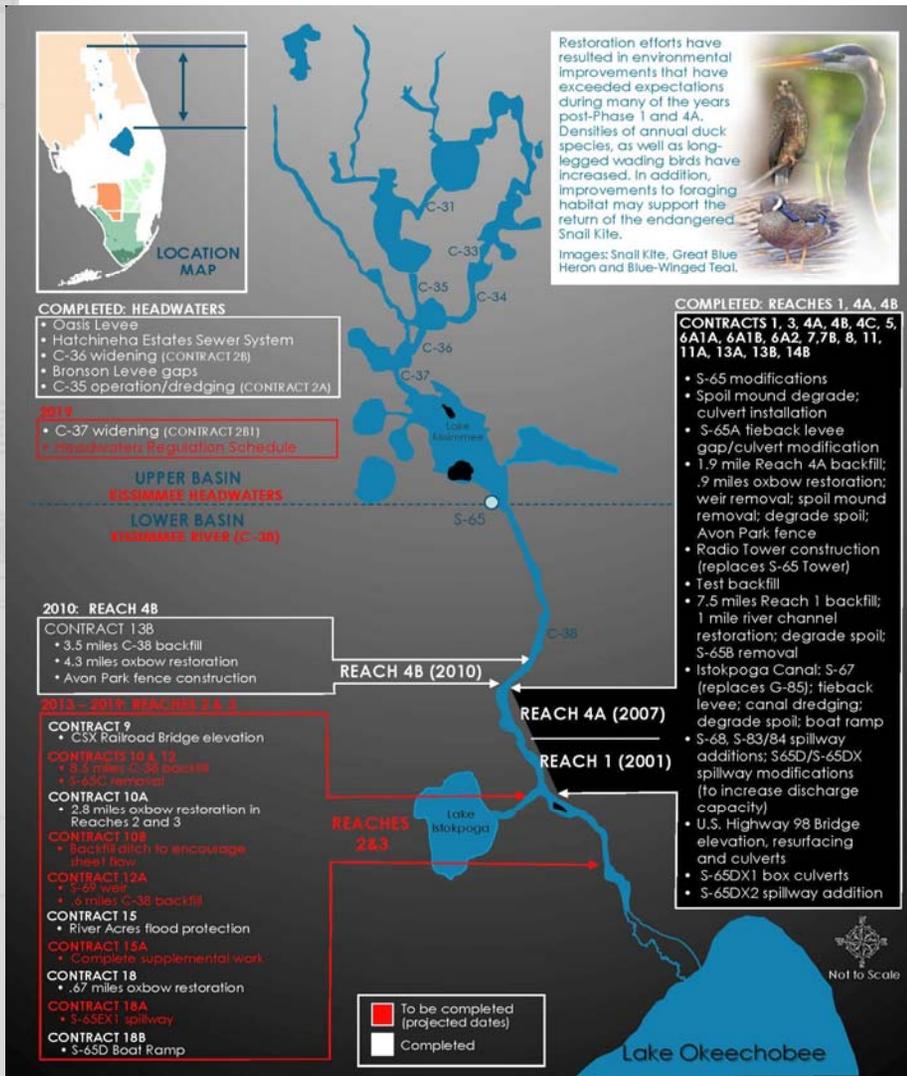
# SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

## Program Structure



# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## Kissimmee River Restoration



Restores critical floodplain habitat and timing of flows to Lake Okeechobee

Total Project Benefits:  
 Conveyance of 130,000 acre-feet of natural floodplain storage to slow the flow of water into Lake Okeechobee & reduce the impacts of high-volume discharges into the St. Lucie & Caloosahatchee estuaries.

Status:

- Final construction contracts underway:
  - S-69 Weir and Canal Backfill
  - Reach 3 Backfill
- Construction completion in 2020/2021; initiate 5-year post construction monitoring



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## Modified Water Deliveries to Everglades National Park



Restores water deliveries to Northeast Shark River Slough in Everglades National Park

Total Project Benefits:

Storage, conveyance and seepage management improve natural water flows to Everglades National Park, provide flood mitigation for residential areas, re-connect freshwater flows, and reduce seepage losses

Status:

Construction complete May 2018

Combined Operational Plan (COP)

--Scheduled for completion summer 2020

--Progress and completion required to support CEPP implementation

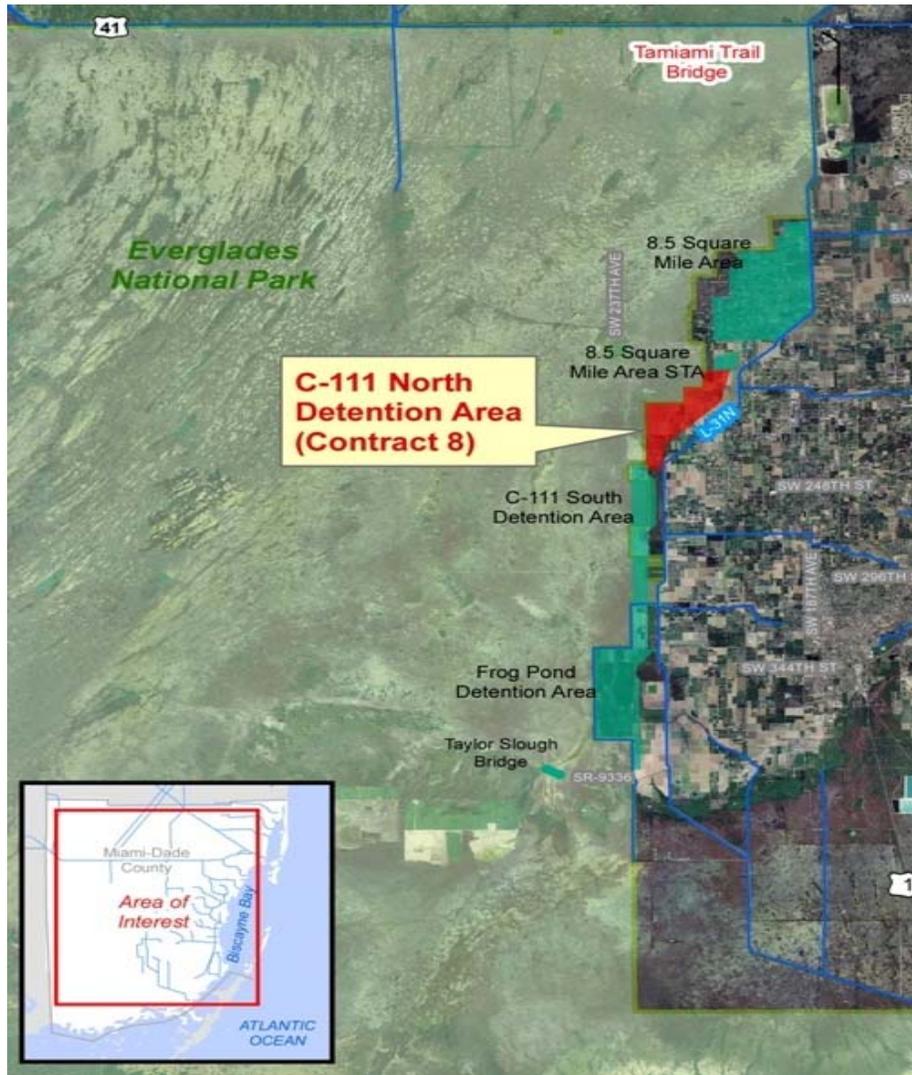


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## C&SF: Canal 111 (C-111) South Dade



Reduces water losses from Everglades National Park and improves freshwater flow to Taylor Slough and Florida Bay

Total Project Benefits:

9,500 acre-feet of storage & seepage that reduces damaging canal discharges to Barnes Sound, reduces seepage losses from ENP, and maintains flood protection for commercial, residential, and agricultural properties to the east

Status:

Construction scheduled for completion in early 2020

Conducting post authorization change report to address temporary pump stations (WRDA 2020)

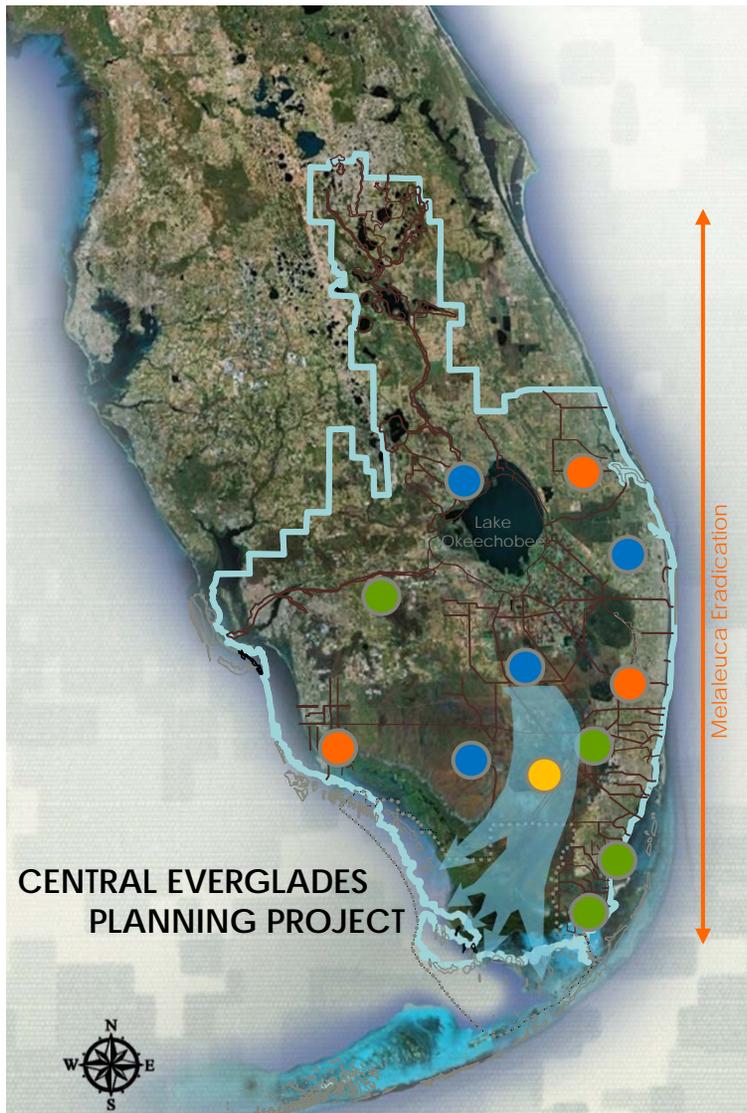


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## Comprehensive Everglades Restoration Plan (CERP)



### 1<sup>st</sup> Generation

Site 1 Impoundment  
Indian River Lagoon – South (IRL-S)  
Picayune Strand Restoration Project  
Melaleuca Eradication and Other Exotic Plants

### 2<sup>nd</sup> Generation

C-43 West Basin Storage Reservoir  
C-111 Spreader Canal Western Project  
Biscayne Bay Coastal Wetlands  
Broward County Water Preserve Area

Central Everglades Planning Project  
--EAA Storage Reservoir

### CERP Planning/Design

Loxahatchee River Watershed Restoration  
Lake Okeechobee Watershed Restoration  
Western Everglades Restoration

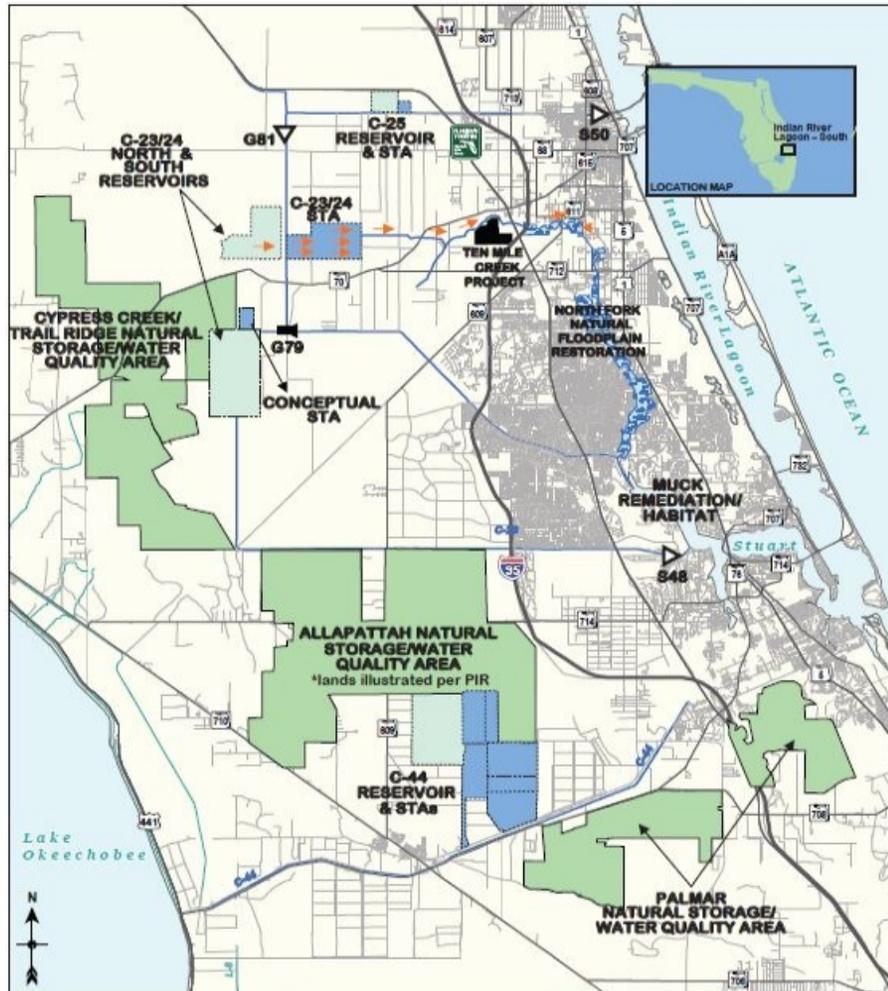


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## CERP: Indian River Lagoon - South



The Indian River Lagoon and St. Lucie Estuary in Martin County are two of the country's most productive and most threatened estuaries; the project will reconnect and restore natural area in the headwaters and improve water flow to the river

### Total Project Benefits:

- Storage and treatment of 60,500 acre-feet local basin runoff prior to it flowing into the St. Lucie Estuary
- 12,000 acres of above ground storage
- 9,000 acres of man made wetlands
- 889 acres of restored oyster habitat
- 922 acres of submerged aquatic vegetation restored

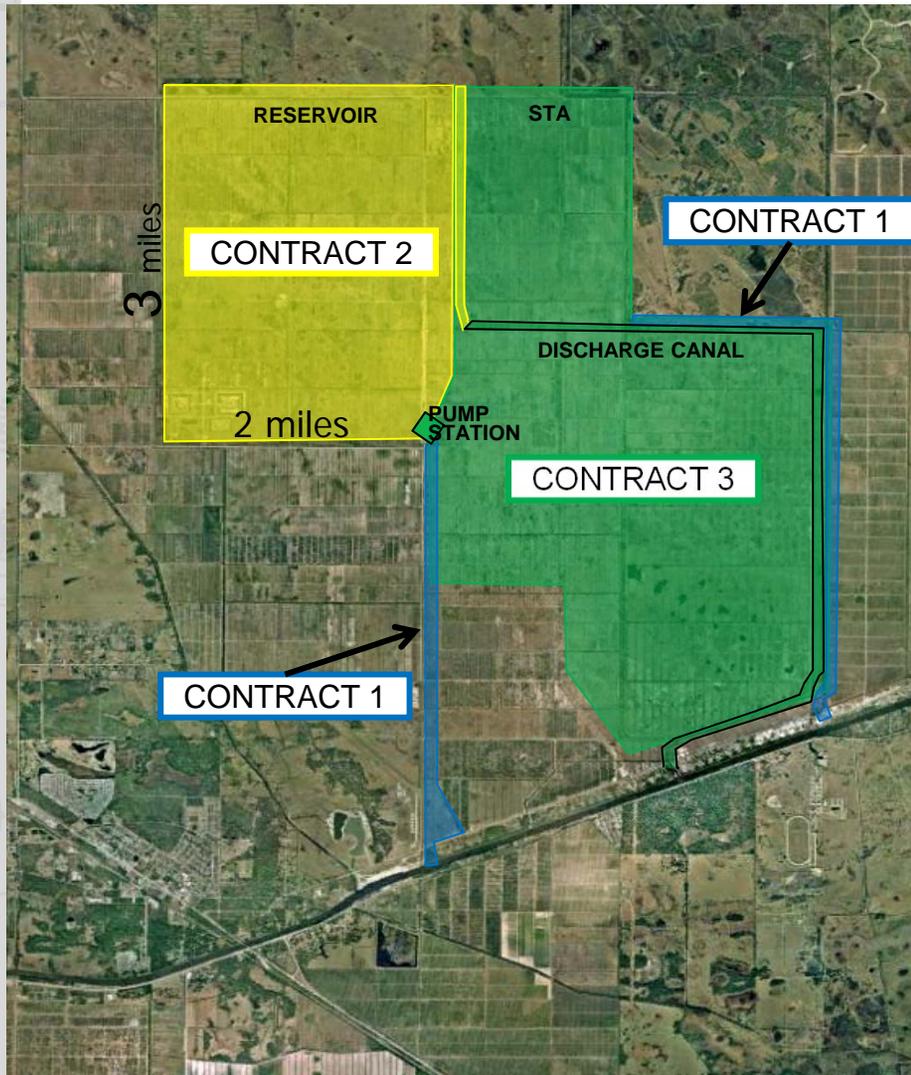


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## CERP: Indian River Lagoon – South: C-44 Reservoir / STA



Purpose: Capture local run-off from the C-44 basin, reducing average annual total nutrient loads and improving salinity regimen for the St. Lucie Estuary and southern portion of the Indian River Lagoon.

Status:

Contract	Status
CNT-1 (USACE) – Intake Canal	Complete
CNT-2 (USACE) – Reservoir	Ongoing
CNT-3 (SFWMD)	
System Discharge	Complete
STA	Ongoing
Pump Station	Complete
OTMP (2-years) – Operational Testing and Monitoring	Following Construction Completion

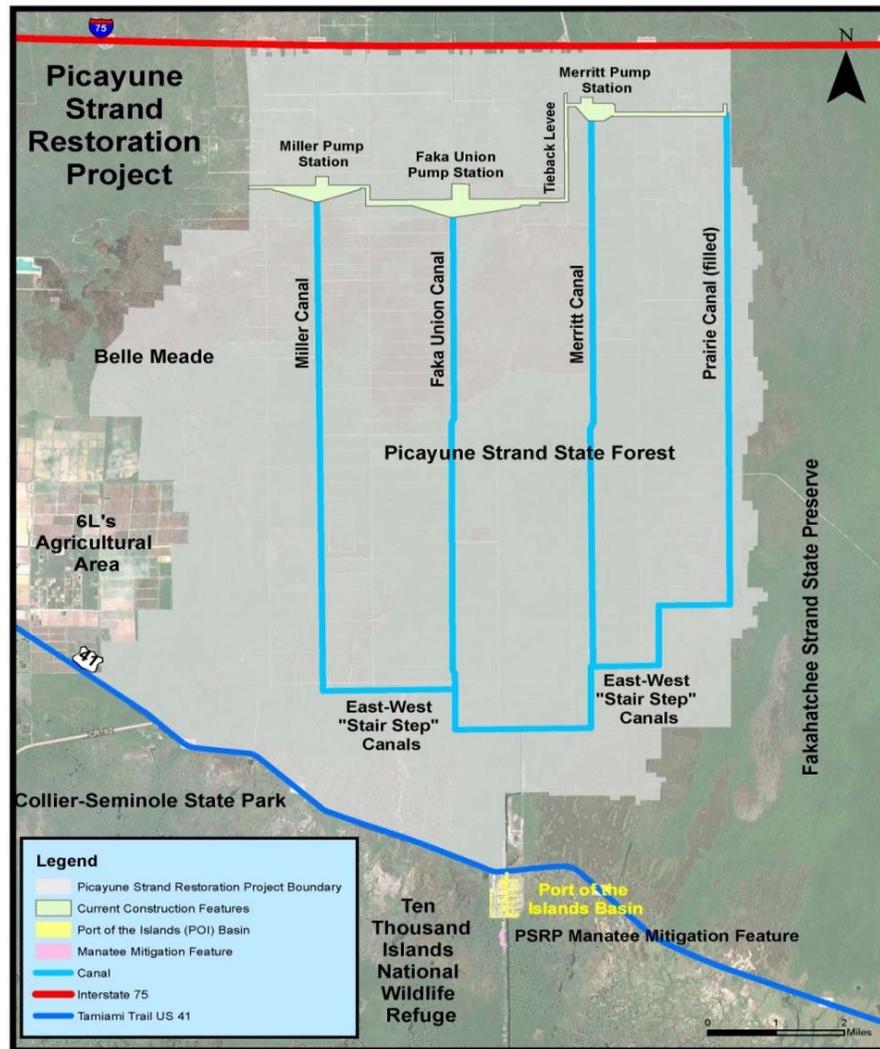


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## CERP: Picayune Strand Restoration Project



The project will restore 55,000 acres of native Florida wetlands and uplands

### Total Project Benefits:

- Conveyance of water will restore natural habitat
- Three pump stations: Merritt, Faka Union, and Miller
- Plugging 48 miles of canals and removing/degrading 260 miles of roads

### Status:

- Miller Pump Station construction complete; finalizing operational testing and monitoring period
- Road removal and canal plugging ongoing
- Design and construction of SW Protection Features



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## CERP: Caloosahatchee River (C-43) West Basin Storage Reservoir



The project will help restore the natural flow of water to the Caloosahatchee River

### Total Project Benefits:

- 170,000 acre-feet of storage that will capture & store basin stormwater runoff, along with a portion of water discharged from Lake Okeechobee, for release into the Caloosahatchee River and Estuary, as needed

### Status:

- SFWMD is designing and constructing project
- Construction completion in 2023
- Post authorization change report to update Total Project Cost (WRDA 2020)

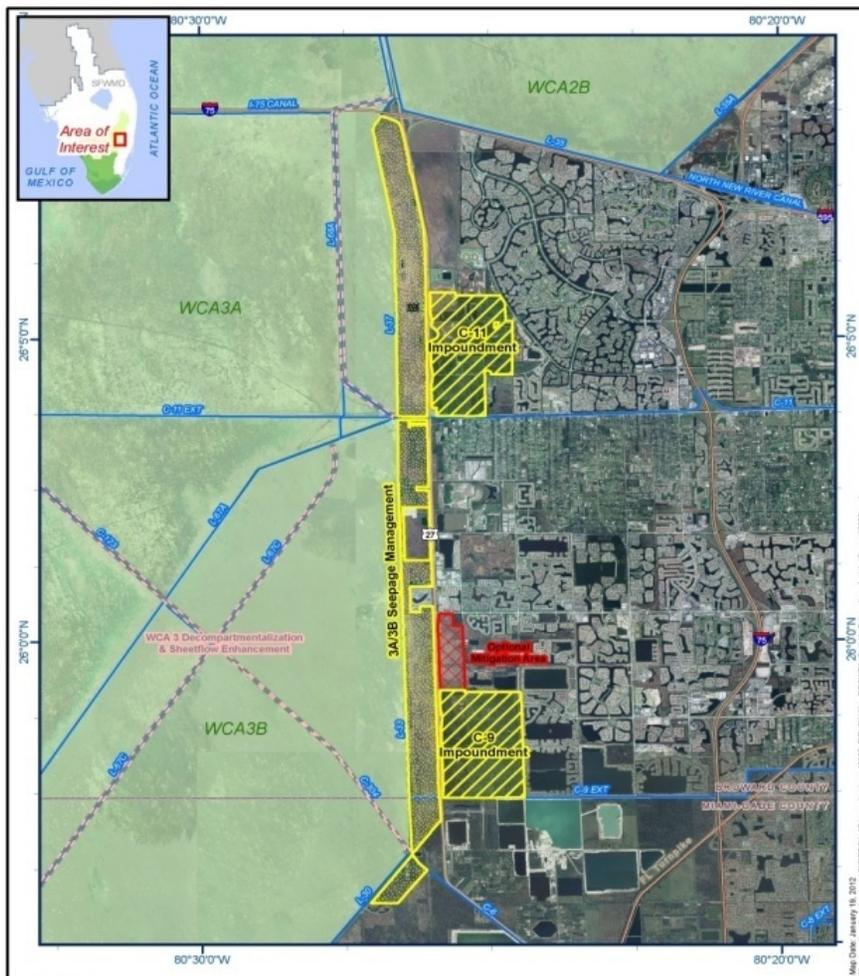


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## CERP: Broward County Water Preserve Areas



The project will improve water quality; reduce seepage loss from the central Everglades, increase water supply, and reduce saltwater intrusion

### Total Project Benefits:

- 10,800 acre-feet of storage and seepage management
- Reductions in seepage losses from Water Conservation Area 3
- Capture water lost to tide for redistribution and natural system deliveries

### Status:

- Initial construction contract (Mitigation Area A Berm) completed in February 2019
- Design ongoing for the C-11 Impoundment



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## CERP: Biscayne Bay Coastal Wetlands

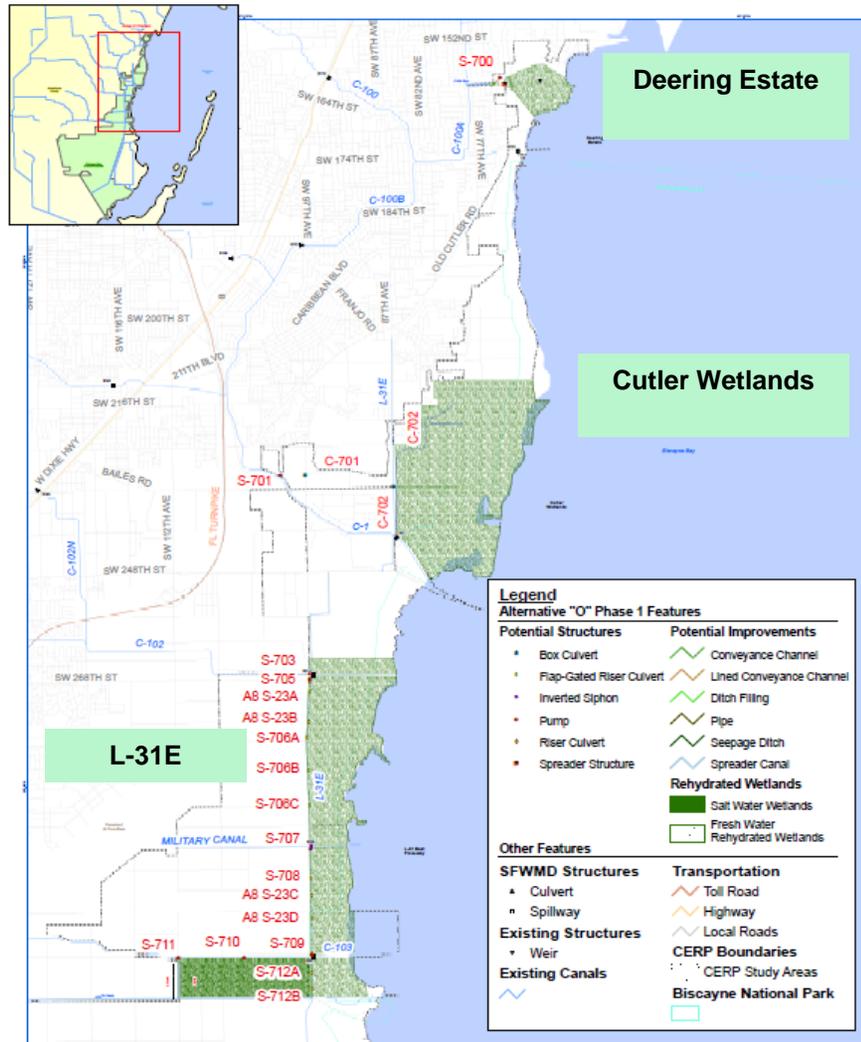
The project will restore the natural pattern of freshwater inflows to Biscayne Bay

Total Project Benefits:

- Conveyance and distribution of flows to rehydrate coastal wetlands, reduce point source discharges, and redistribute surface water; improve the ecology of Biscayne Bay

Status:

- SFWMD completed Deering Estate and portions of the L-31 East culverts
- SFWMD constructing L-31 East components
- USACE design completion of final L-31 East components; construction contract award in 2020
- SFWMD designing Cutler Wetlands with construction initiation in 2020

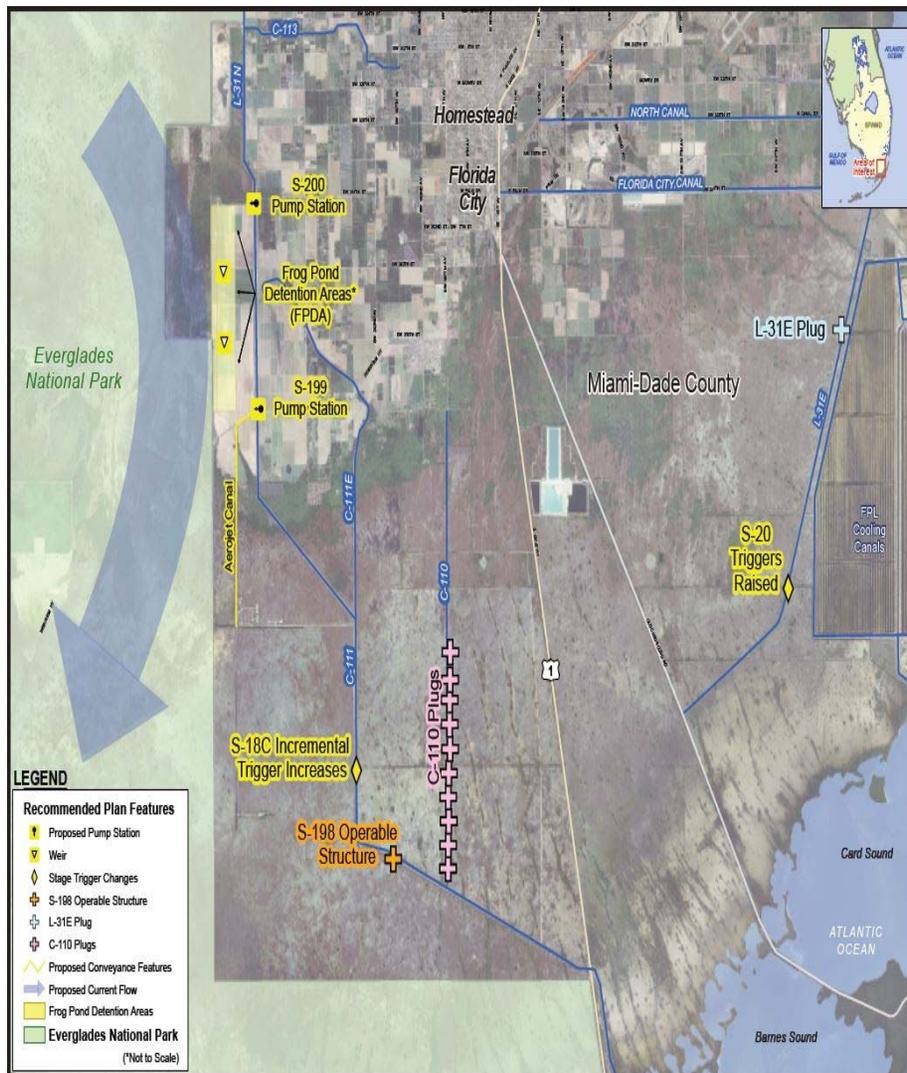


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## CERP: C-111 Spreader Canal Western Project



The project will reduce water loss from Taylor Slough and increase freshwater flow to Florida Bay

### Total Project Benefits:

- 590 acres of conveyance and storage that will reduce seepage losses from Everglades National Park, provide increased flows to Florida Bay, and restore near-shore habitat conditions for colonies of wading birds

### Status:

- SFWMD completed construction of main project features
- Project operations and monitoring ongoing

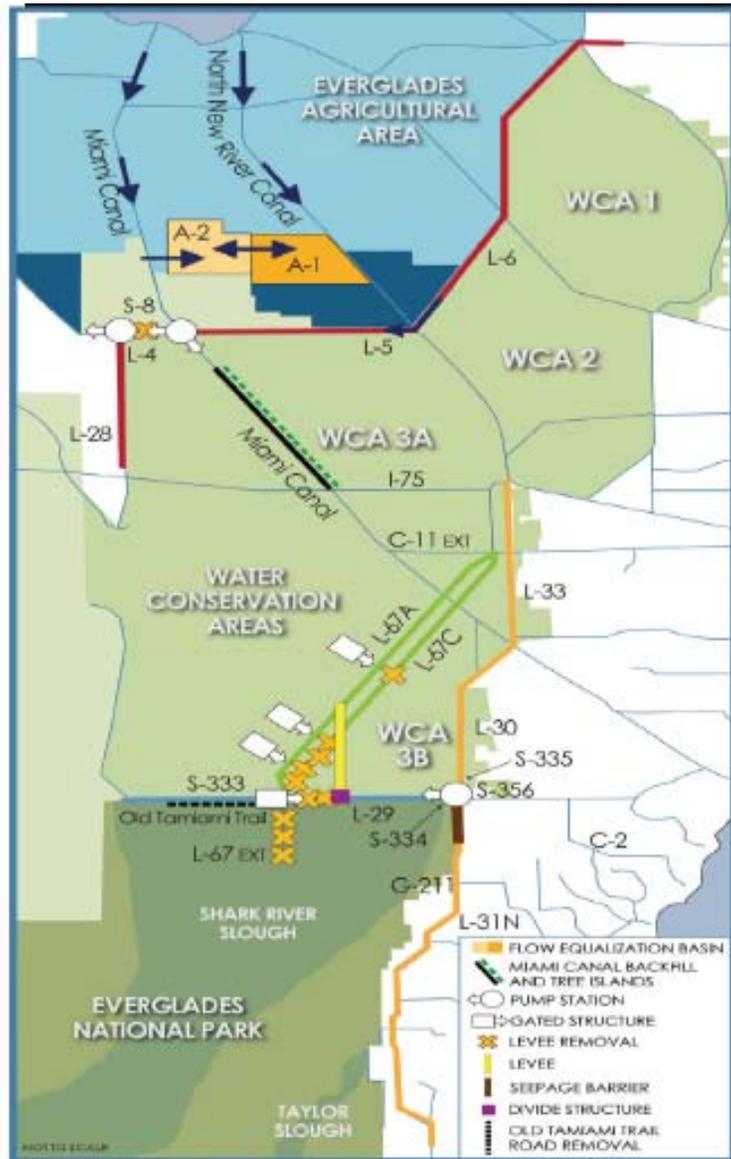


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## CERP: Central Everglades Planning Project (CEPP)



CEPP focuses restoration on more natural flows into and through the central and southern Everglades by:

- Increasing storage, treatment and conveyance of water south of Lake Okeechobee
- Removing canals and levees within the central Everglades
- Retaining water within Everglades National Park

Status:

- CEPP PPA execution in 2020
- SFWMD engaging design and construction of CEPP South Features; SAJ design ongoing
- EAA Reservoir (Section 203) authorized by WRDA 2018 as a part of CEPP New Water; completing Section 203 Follow-up Report
- SAJ scheduled to award construction contracts in 2020, 2021, and 2022
- COP progress and completion required for implementation



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## CERP: Loxahatchee River Watershed Restoration Project

### Recommended Plan – Alternative 5R



Restore and sustain the overall quantity, quality, timing, and distribution of fresh waters to the federally designated “National Wild and Scenic” Northwest Fork of the Loxahatchee River. This project also seeks to restore, sustain, and reconnect the wetlands and watersheds that form the historic headwaters for the river and its tributaries.

### Status:

- Project Implementation Report (PIR) in final stages of development.
- Senior Leaders’ Panel – December 2019
- Chief’s Report – March 2020
- WRDA 2020 Consideration



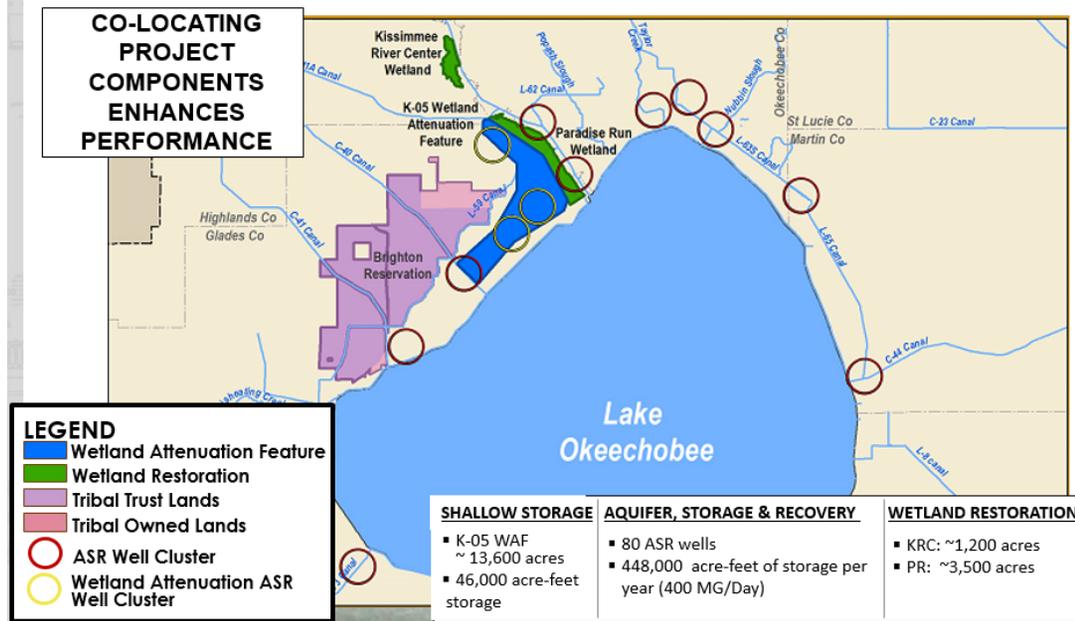
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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## CERP: Lake Okeechobee Watershed Restoration Project

### Recommended Plan – Alternative 1BWR



Improve water levels in Lake Okeechobee; improve the quantity and timing of discharges to the St. Lucie and Caloosahatchee estuaries; restore degraded habitat for fish and wildlife throughout the study area; and increase the spatial extent and functionality of wetlands.

#### Status:

- Project Implementation Report (PIR) in final stages of development.
- Senior Leaders' Panel – February 2020
- Chief's Report – May 2020
- WRDA 2020 Consideration

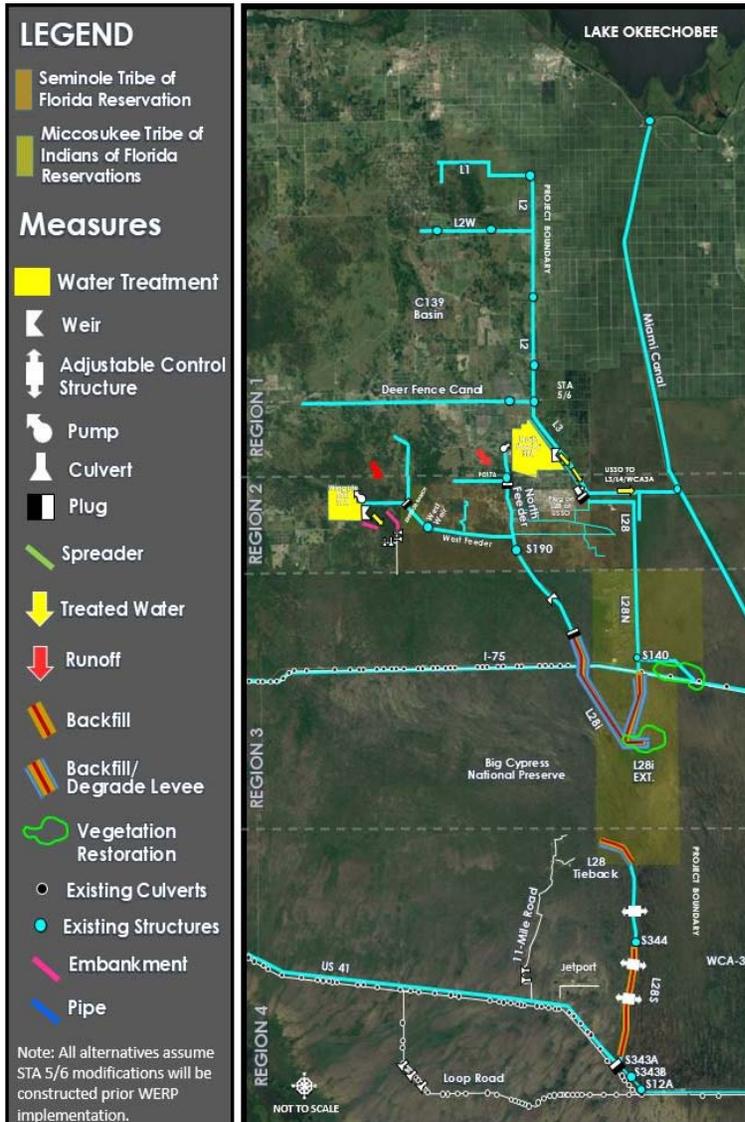


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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## CERP: Western Everglades Restoration Project



Improve the quantity, quality, timing, and distribution of water in the western Everglades. Reestablish sheetflow across the Big Cypress Seminole Indian Reservation and into Big Cypress National Preserve while maintaining existing levels of flood protection and water quality standards.

### Status:

- Project briefed to SFER Task Force on 29 October 2019 with notification of intention to terminate.
- SFER Task Force request, and USACE concurrence, to conduct additional meeting to discuss project and confirm full support.
- Meeting conducted on 22 November 2019 hosted by the SFER Task Force and included USACE, SFWMD, DOI, NPS, STOF, and MTOIF.
- Path forward to be determined.



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## FY20 Budget Review

<b>CONSTRUCTION</b>	
<b>Non-CERP</b>	
Canal 111 (C-111) South Dade	\$ 200,000
Kissimmee River Restoration (KRR)	\$ 1,000,000
<b>Non-CERP Subtotal</b>	<b>\$ 1,200,000</b>
<b>CERP</b>	
CERP - Caloosahatchee River (C-43) West Basin Storage Reservoir	\$ 1,800,000
CERP - Indian River Lagoon South (IRL-S)	\$ 27,500,000
CERP - Picayune Strand Restoration Project (PSRP)	\$ 38,100,000
CERP - Biscayne Bay Coastal Wetlands (BBCW)	\$ 38,600,000
CERP - Broward County Water Preserve Areas (BCWPA)	\$ 11,000,000
CERP - Central Everglades Planning Project (CEPP)	\$ 70,845,000
CERP - CERP Design: BBCW Phase 2	\$ 2,500,000
CERP - CERP Program Management	\$ 8,455,000
<b>CERP Subtotal</b>	<b>\$ 198,800,000</b>
<b>CONSTRUCTION TOTAL</b>	<b>\$ 200,000,000</b>
<b>OPERATIONS &amp; MAINTENANCE</b>	<b>\$ 5,454,000</b>



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## Key Take Aways

Strong Federal Interest & Strategic Partnerships

Continued progress in all phases: planning, design, construction, operations & maintenance

Interrelated milestones between SFER projects

Continued Administration and Congressional Funding

[www.evergladesrestoration.gov](http://www.evergladesrestoration.gov)



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