SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

SFER Task Force

Howard Gonzales Jr.

U.S. Army Corps of Engineers, Jacksonville District

25 July 2018

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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) Key Take Aways

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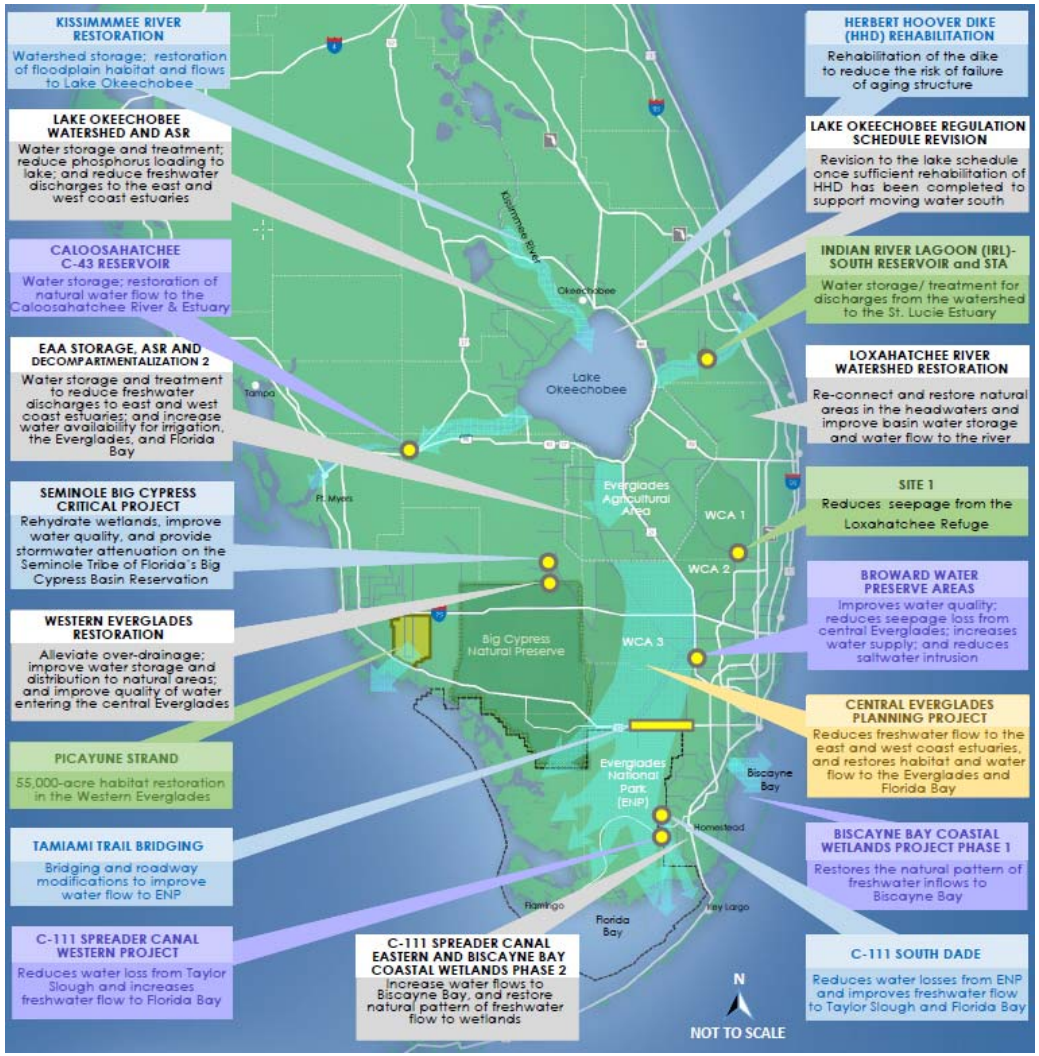
SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Program Overview



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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Strong Federal Interest

- Large-scale, watershed project area (Over 18,000 square miles), including Everglades & Dry Tortugas National Park, Biscayne National Park, Big Cypress National Preserve, 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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Partnerships and Support

- Federal Family

- South Florida Ecosystem Restoration Task Force
  - 14 Members: 7 Federal, 2 Tribal, 5 State and Local Government representatives, at the Secretary/Assistant Secretary Level

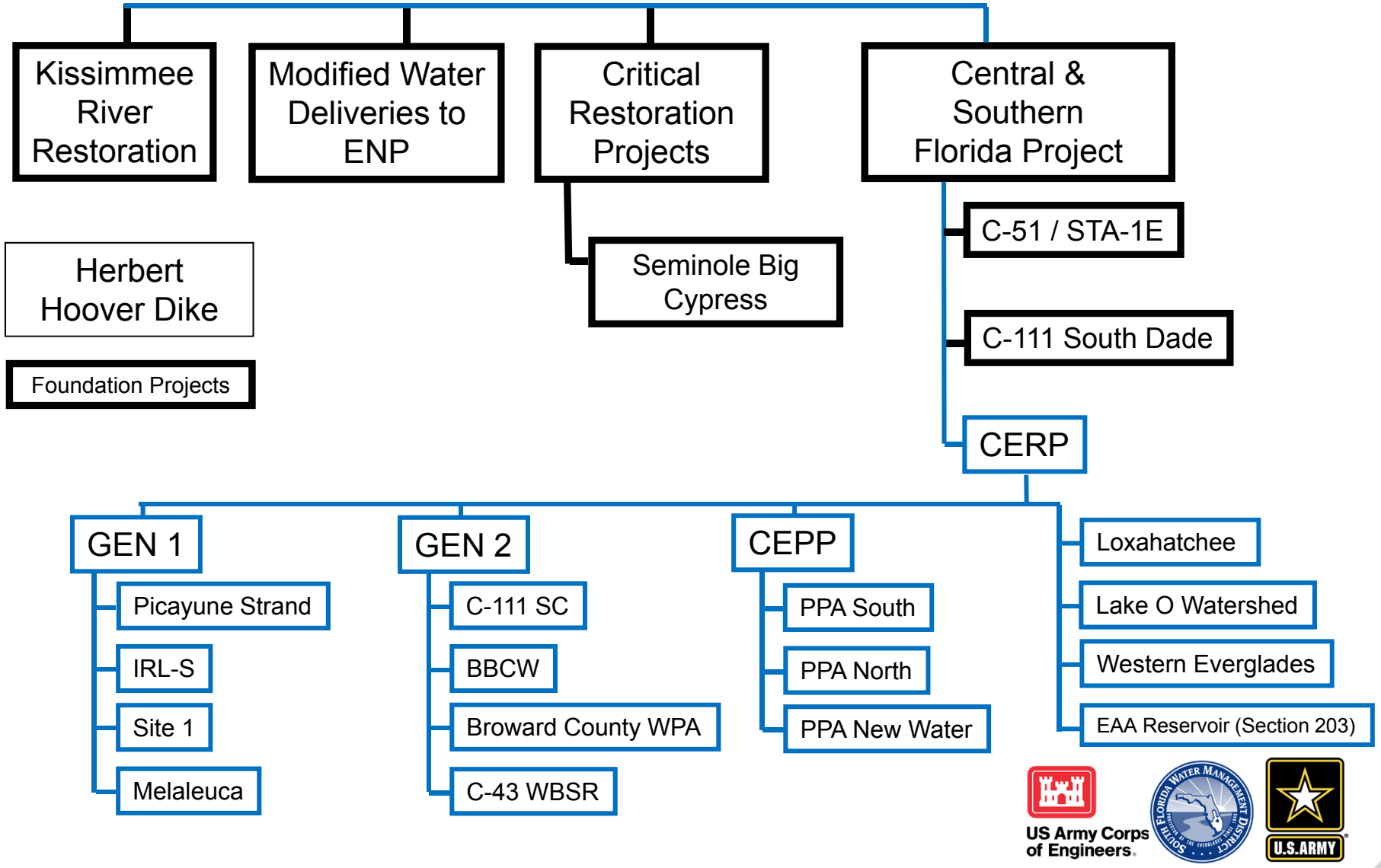
- State of Florida and the South Florida Water Management District

- Tribal Nations
  - Miccosukee Tribe of Indians of Florida
  - Seminole Tribe of Florida

- Non-Governmental Organizations and Stakeholders
  - Everglades Coalition; including Audubon of Florida and the Everglades Foundation
  - Everglades Caucus, House of Representatives

SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Program Structure



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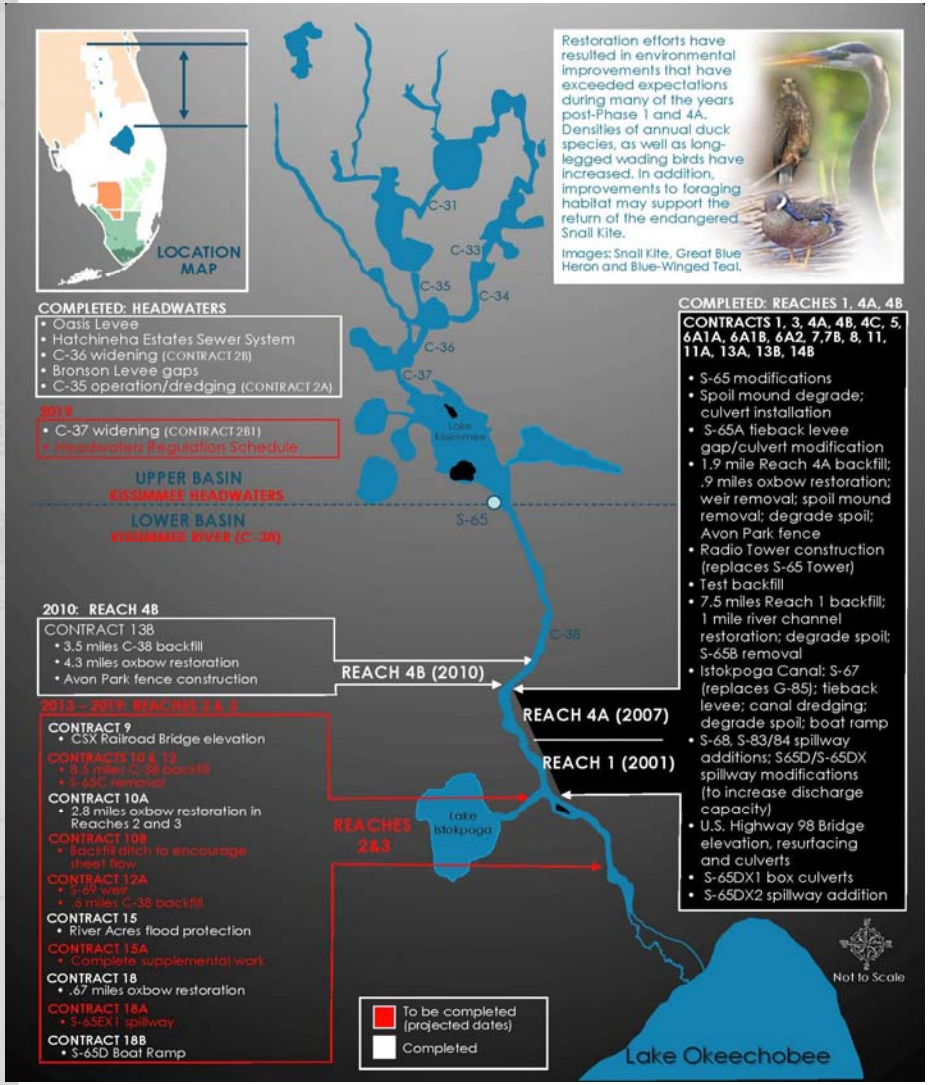
Kissimmee River Restoration



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:

- Completed Post Authorization Change Report (PACR) for WRDA 2018 consideration
- Final construction contracts awarded in FY17
  - C-37 Embankment Armoring
  - S-69 Weir and Canal Backfill
- Assessing and quantifying impacts from 2017 high water and Hurricane Irma
- Construction completion in 2020; initiate 5-year post construction monitoring

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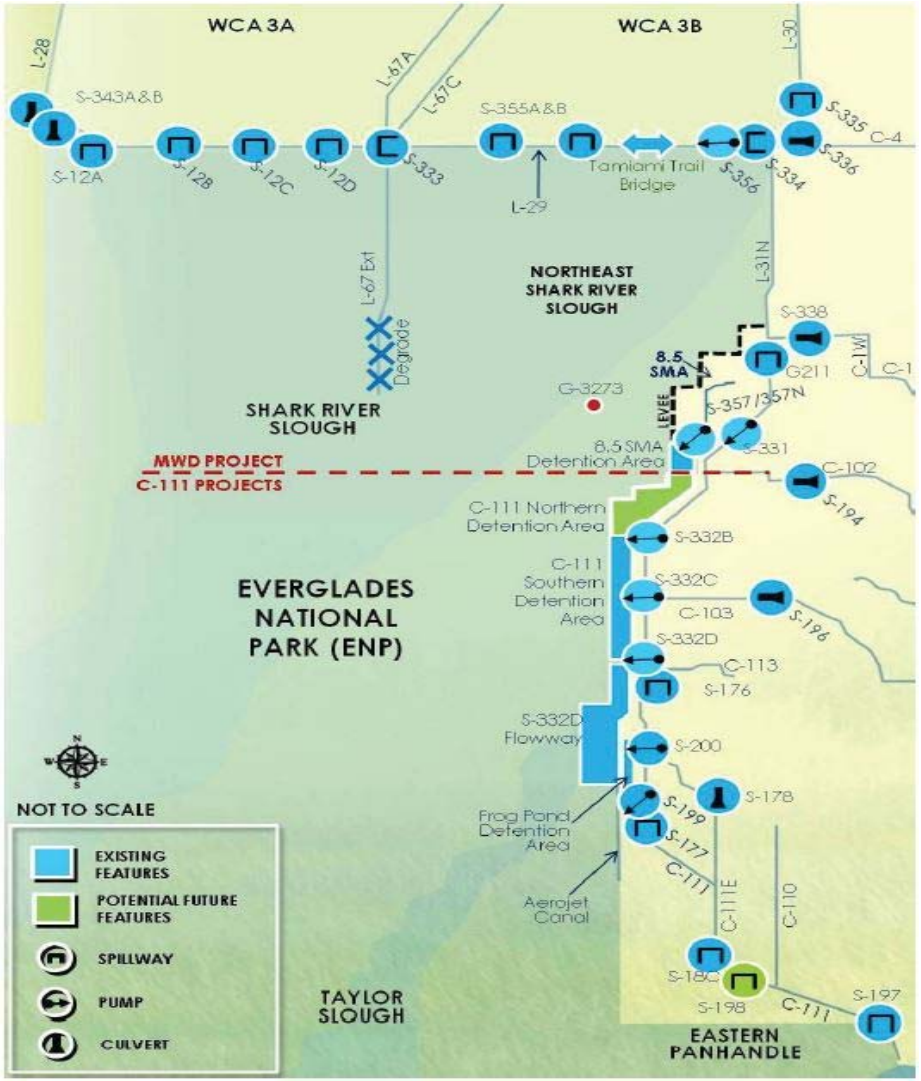
Modified Water Deliveries to Everglades National Park



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!

Conducting Increment Tests. Increment 1 produced an increase in the net flow of water into Northeast Shark River Slough; extensive data has been collected to use in Increments 2 and 3

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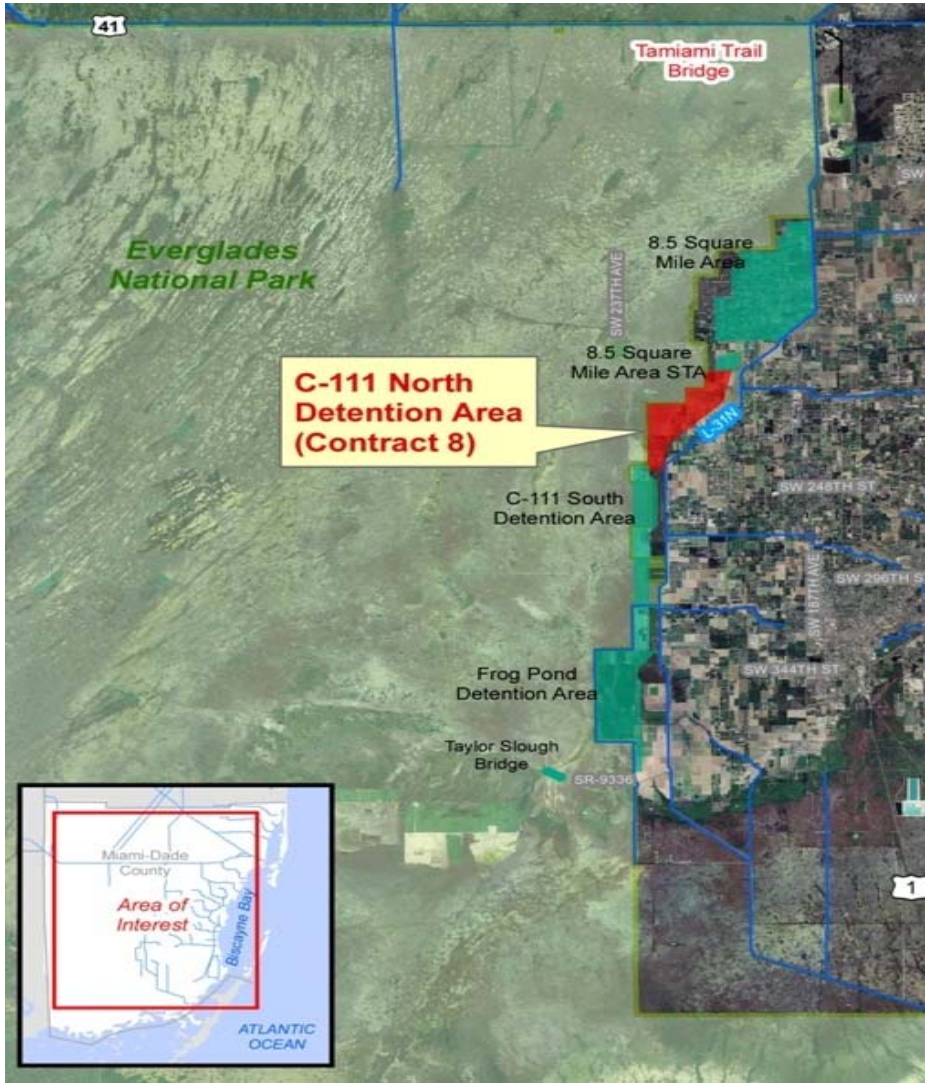
C&SF: Canal 111 (C-111) South Dade



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:

Completed construction of critical project features (June); with balance of construction complete in fall 2018.

Initiating post authorization change report to address temporary pump stations

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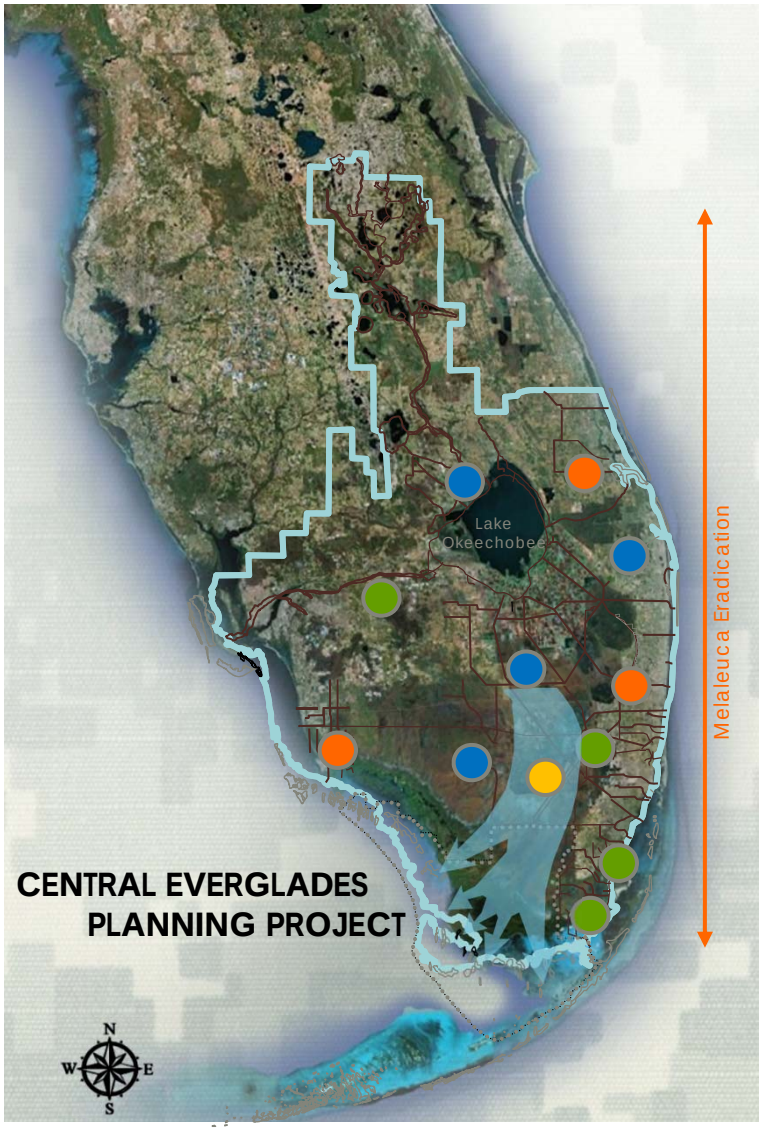
Comprehensive Everglades Restoration Plan (CERP)



1st Generation

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

2nd 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

CERP Planning/Design

Loxahatchee River Watershed
Lake Okeechobee Watershed
Western Everglades
EAA Storage Reservoir (Section 203)

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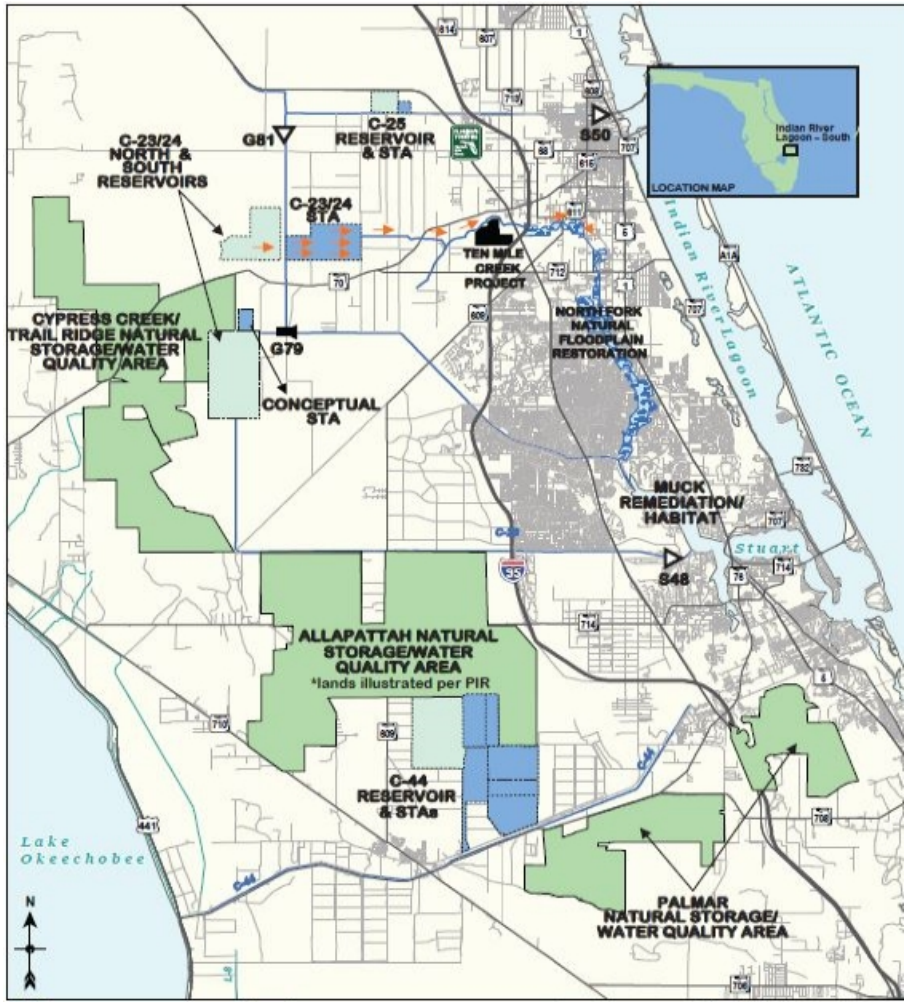
CERP: Indian River Lagoon - South



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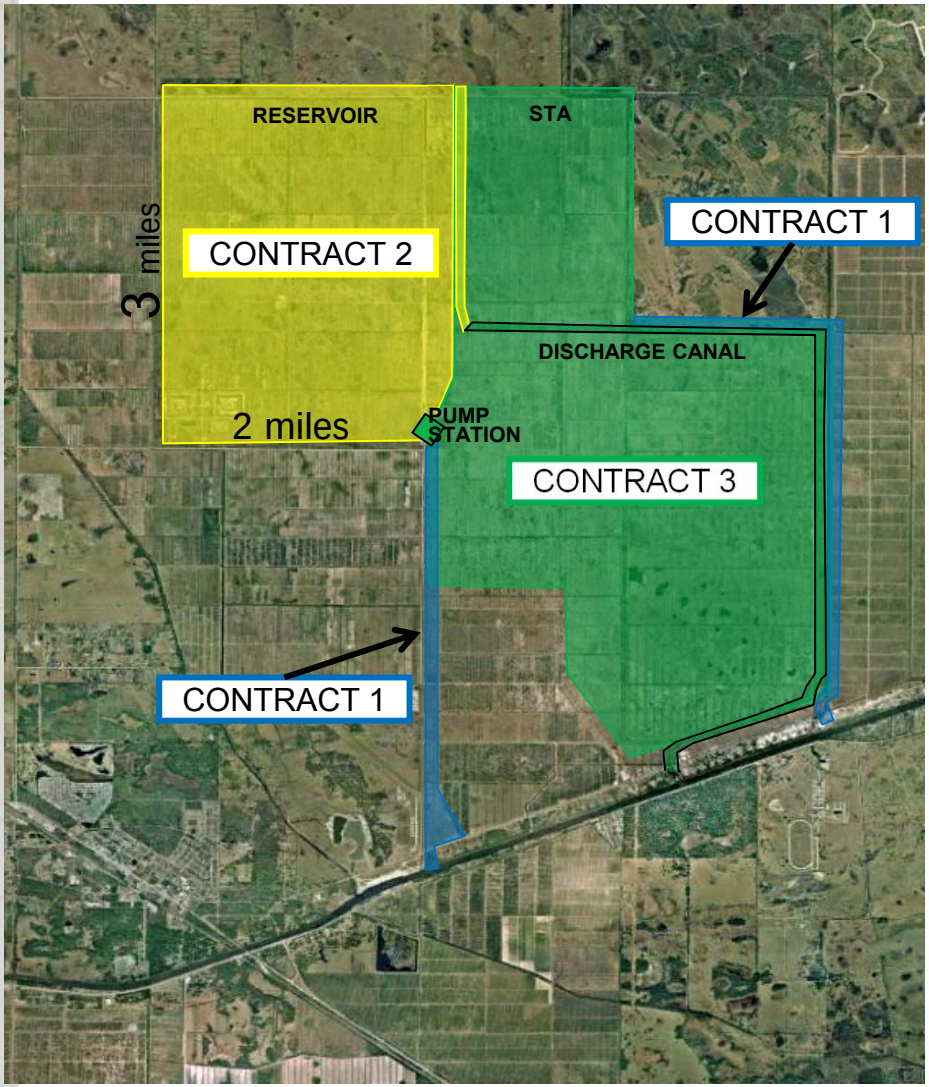
CERP: Indian River Lagoon – South: C-44 Reservoir / STA



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	Award	Completion
CNT-1 (USACE)	JUL 11	Completed
CNT-2 (USACE)	SEP 15	FY 2020
CNT-3 (SFWMD)		
System Discharge	SEP 14	Completed
STA	OCT 14	OCT 18
Pump Station	APR 15	DEC 18
OTMP		FY 2020-2022

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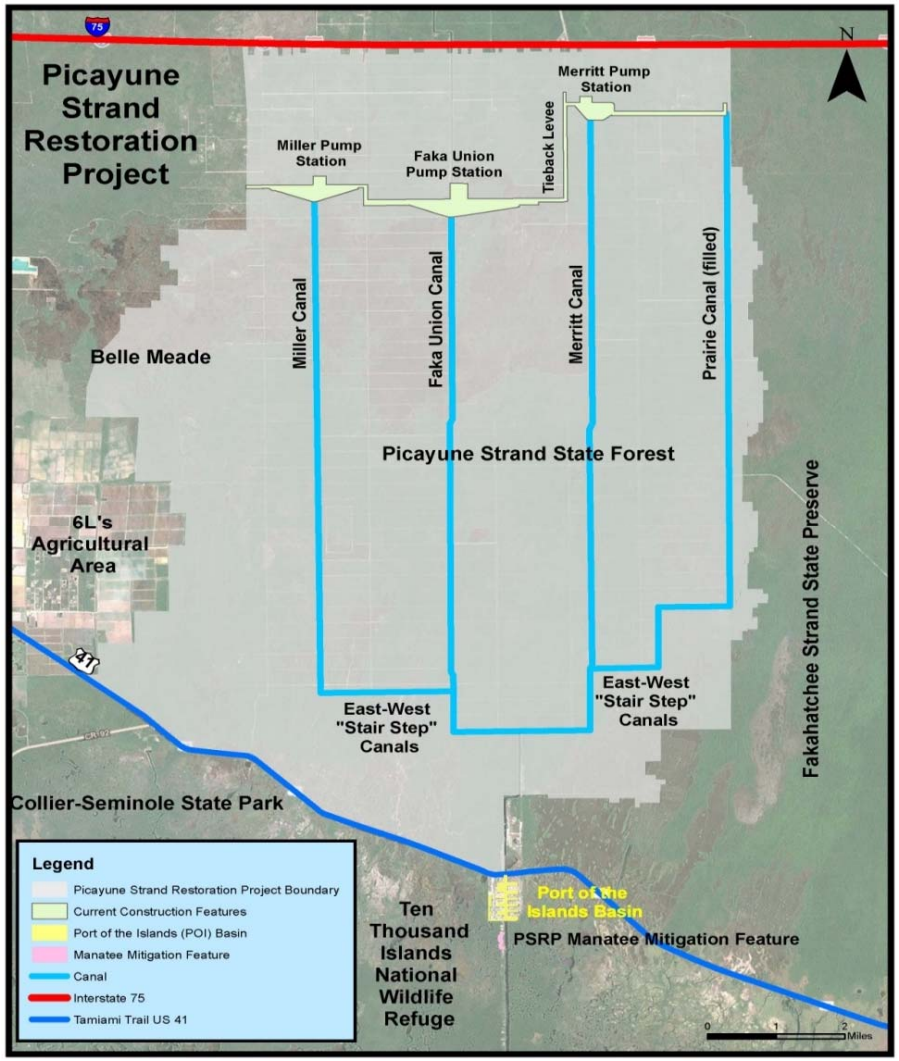
CERP: Picayune Strand Restoration Project



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

Total Project Benefits:

- Conveyance of water which will restore more than 55,000 acres of natural habitat
- Three pump stations: Merritt, Faka Union, and Miller
- Plugging 48 miles of canals and removing/degrading 260 miles of roads
- Features to mitigate effects of manatee refugium at the Port of the Islands Marina

Status:

- Faka Union Pump Station to O&M in January 2018
- Miller Pump Station construction completion in May 2018; initiate 1-year operational testing and monitoring period
- Design 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 December 2023

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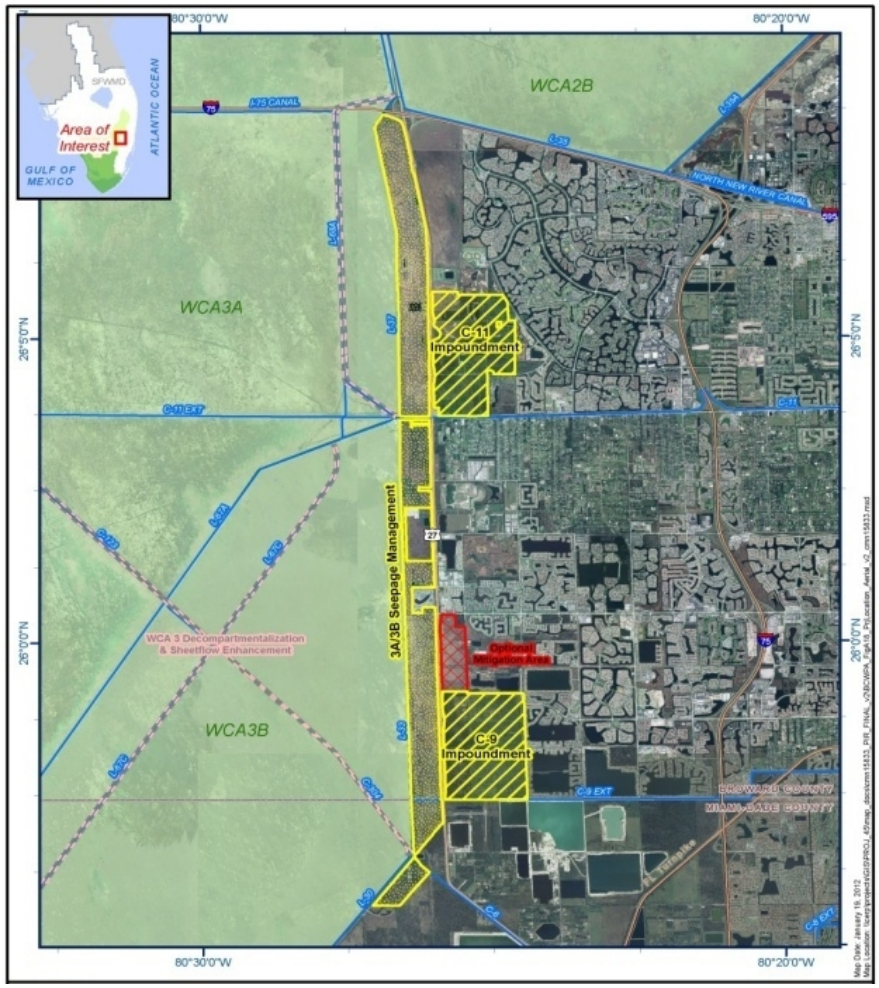
CERP: Broward County Water Preserve Areas



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) awarded in September 2017; construction underway
- Design initiation for the C-11 Impoundment

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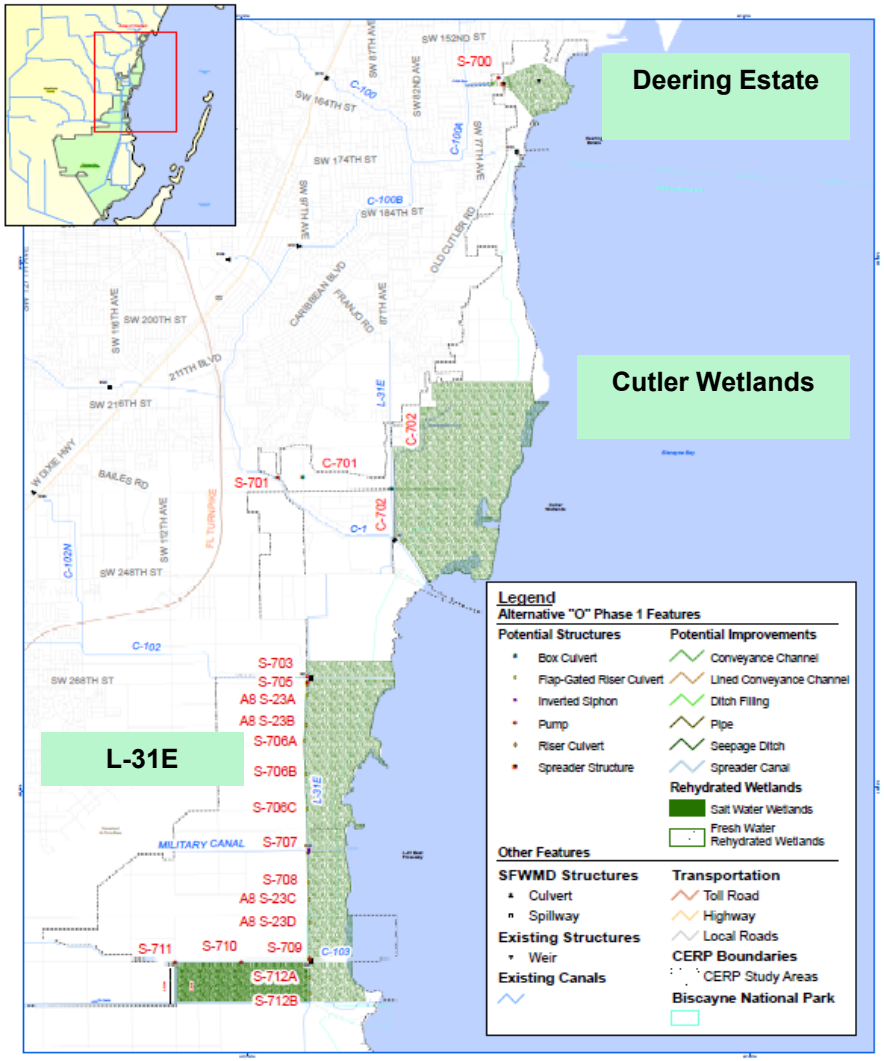
CERP: Biscayne Bay Coastal Wetlands



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; to 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
- SFWMD initiates design of Cutler Wetlands in FY 2019

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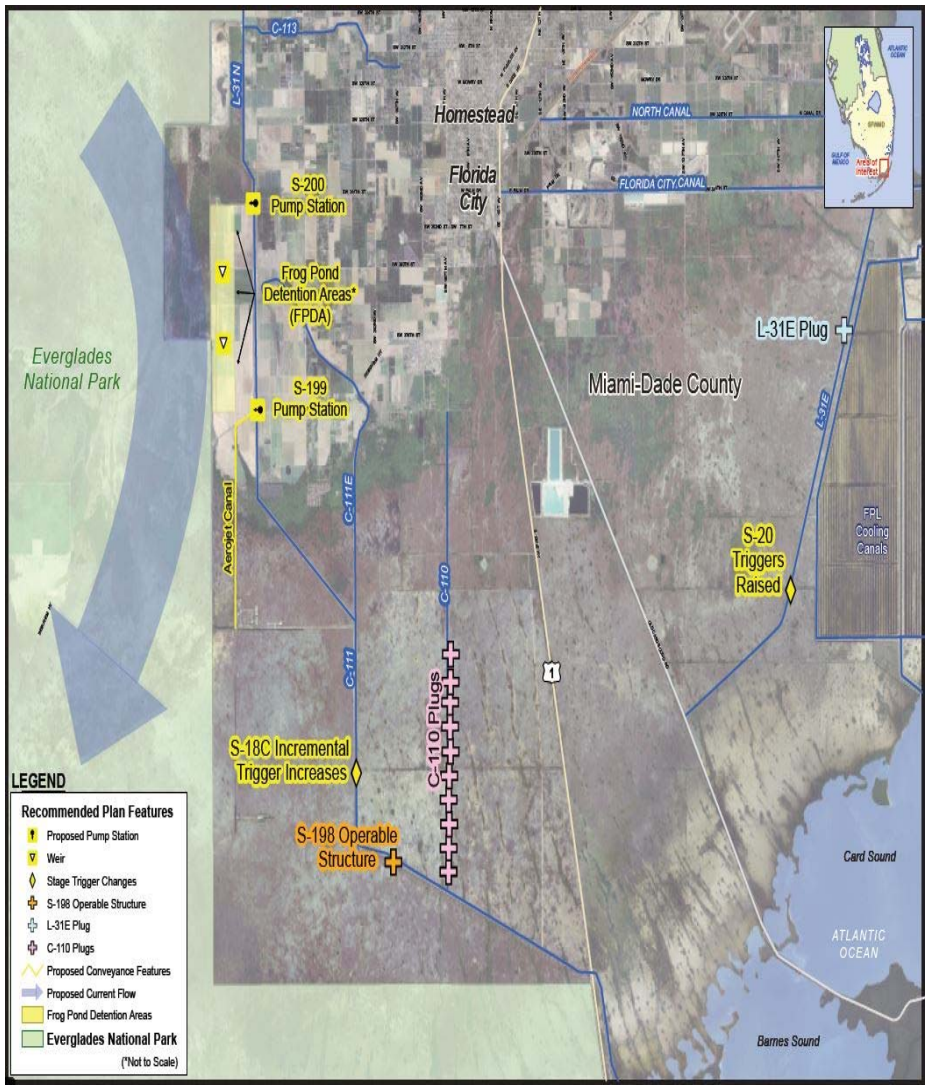
CERP: C-111 Spreader Canal Western Project



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 indicate flow has increased by ~25% into Taylor Slough

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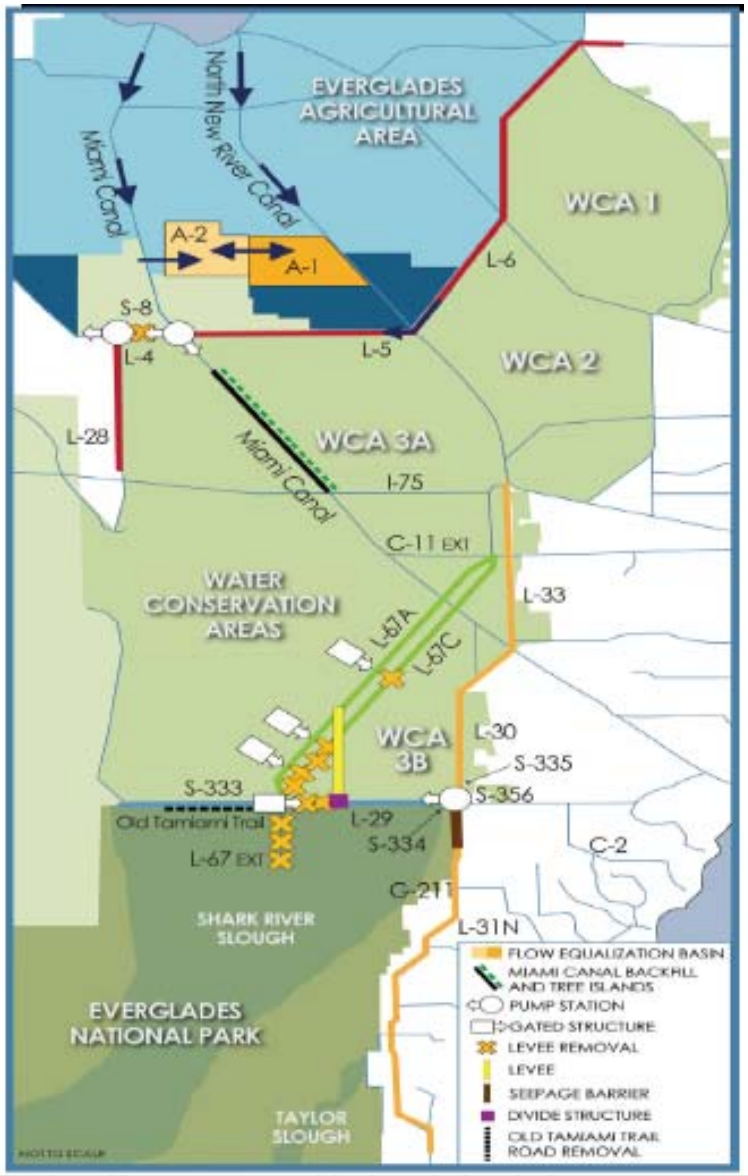
CERP: Central Everglades Planning Project (CEPP)



CEPP develops the next increment of project components that focus 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 South Validation initiated in October 2017
- SFWMD engaging design and construction of key CEPP South Features

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CERP: Loxahatchee River Watershed Restoration Project

The project aims to 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:

- SMART Planning study initiated in January 2016
- Tentatively Selected Plan (TSP) Milestone = 31 July 2018

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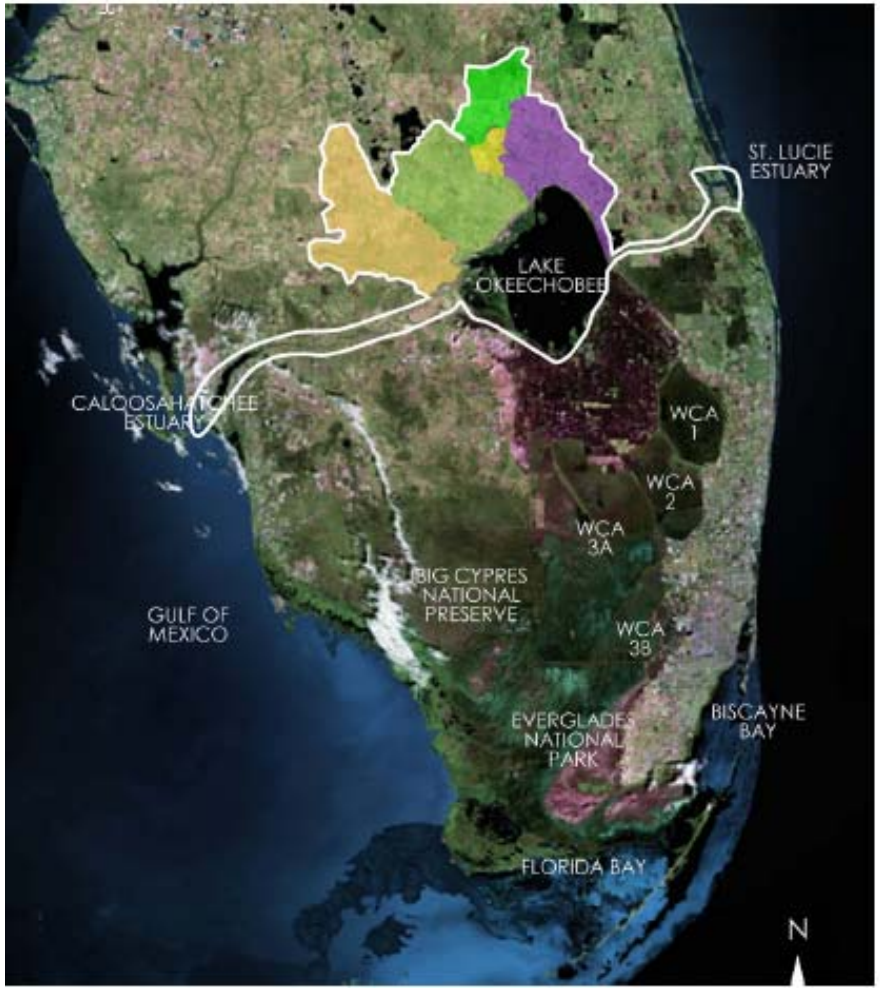
SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

CERP: Lake Okeechobee Watershed Restoration Project



The Lake Okeechobee Watershed Project is an Everglades restoration planning effort that will 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:

- SMART Planning study initiated in July 2016
- Public Review of Draft PIR/EIS from 6 July to 20 August 2018
- Study completion scheduled for summer 2019

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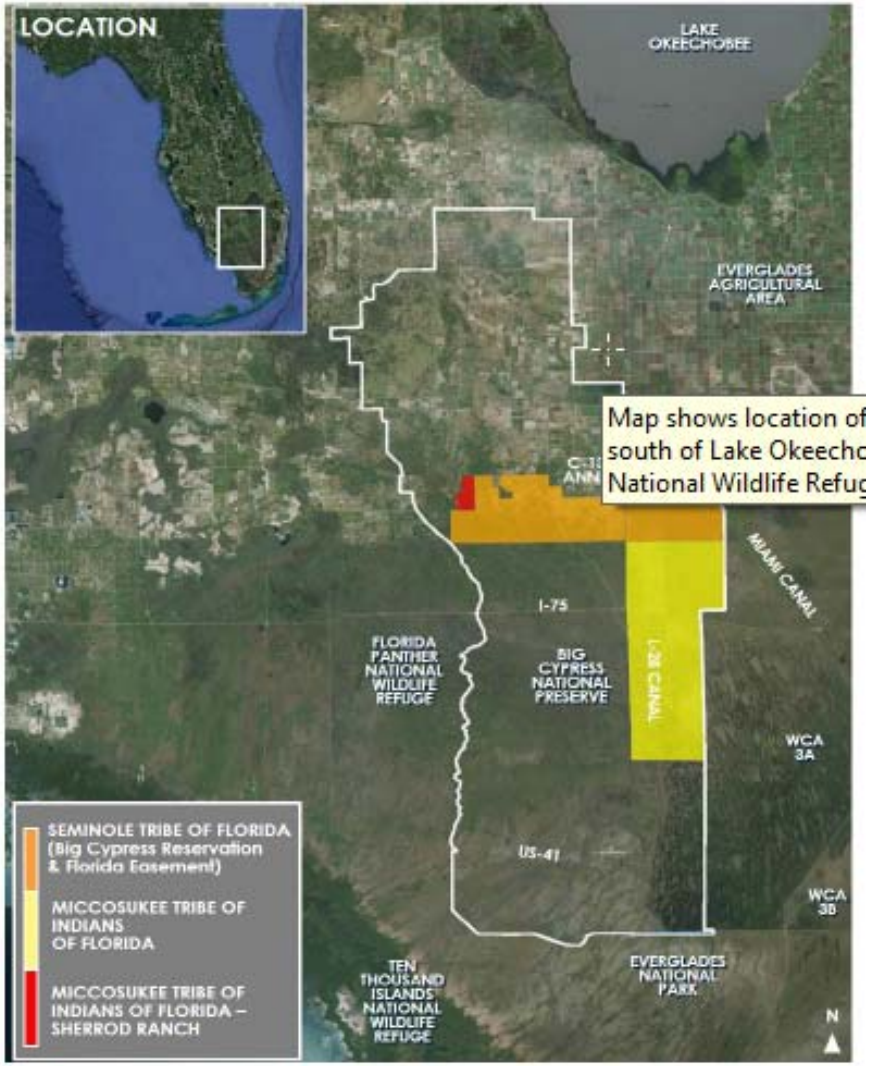
CERP: Western Everglades Restoration Project



The project aims to improve the quantity, quality, timing, and distribution of water in the western Everglades and seeks to use a series of active and passive water management features and water quality features, and make alterations to existing canals and levees to 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:

- SMART Planning study initiated in August 2016
- Study completion scheduled for summer 2020

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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

FY18 Allocations & FY19 PBUD - Construction

	FY18 Conference Allocation	FY18 Adjusted Budget (Reallocation)	FY18 Add'l Work Plan Funds	FY18 Total WP Allocations	FY18 Add'l Supp Funds	FY18 Total Allocations		FY19 PBUD Jsheet
KISSIMMEE RIVER, FL	**$ 2,800,000**	**$ 2,428,000**	**$ 7,000,000**	**$ 9,428,000**		**$ 9,428,000**		**$ 600,000**
C&SF								
C&SF:WEST PALM BEACH CANAL	$ 200,000	$ 100,000		$ 100,000		$ 100,000		
C&SF:SOUTH DADE COUNTY (C-111)	$ 3,372,152	$ 5,240,152		$ 5,240,152	$ 1,704,000	$ 6,944,152		
Contracts 8, 8a, 9		$ 3,467,000		$ 3,467,000		$ 3,467,000		
Post Authorization Change Report		$ 800,000		$ 800,000		$ 800,000		
Combined Operational Plan		$ 973,152		$ 973,152		$ 973,152		
SUBTOTAL C&SF (Non-CERP)	**$ 3,572,152**	**$ 5,340,152**	**$ -**	**$ 5,340,152**	**$ 1,704,000**	**$ 7,044,152**		**$ -**
C&SF:CERP:LOXAHATCHEE	$ 595,806	$ 595,806		$ 595,806		$ 595,806		
C&SF:CERP:LAKE O WATERSHED	$ 1,371,000	$ 1,371,000	$ 1,380,000	$ 2,751,000		$ 2,751,000		
C&SF:CERP:WESTERN EVERGLADES	$ 2,356,240	$ 2,206,000	$ 712,003	$ 2,918,003		$ 2,918,003		
C&SF:CERP:CEPP	$ 1,000,000	$ 1,000,000		$ 1,000,000		$ 1,000,000		
C&SF:CERP:EAA		$ 200,000		$ 200,000		$ 200,000		
C&SF:CERP:INDIAN RIVER LAGOON - SOUTH	$ 48,729,802	$ 47,752,042	$ 11,816,841	$ 59,568,883		$ 59,568,883		$ 57,945,000
C-44 Reservoir	$ 48,729,802	$ 44,752,042	$ 8,316,841	$ 53,068,883		$ 53,068,883		$ 57,945,000
C-23/24 North Reservoir Design		$ 3,000,000	$ 3,500,000	$ 6,500,000		$ 6,500,000		
C&SF:CERP:PICAYUNE STRAND	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 10,000,000		$ 10,000,000		
C&SF:CERP:BCWPA	$ -	$ 1,360,000	$ 3,017,886	$ 4,377,886		$ 4,377,886		
NMA-A Berms EDC/SA		$ 1,330,000		$ 1,330,000		$ 1,330,000		
Design C-11 Impoundment		$ 30,000	$ 3,017,886	$ 3,047,886		$ 3,047,886		
C&SF:CERP:BBCW	$ -	$ 78,000		$ 78,000		$ 78,000		
Contract 3 EDC/SA		$ 78,000		$ 78,000		$ 78,000		
C&SF:CERP:C-111 SPREADER CANAL	$ -	$ 10,000		$ 10,000		$ 10,000		
C&SF:CERP:C-43 CALOOSAHATCHEE	$ 1,500,000	$ 700,000		$ 700,000		$ 700,000		$ 1,500,000
C&SF:CERP:DECOMP PHYSICAL MODEL	$ -	$ 50,000		$ 50,000		$ 50,000		
SUBTOTAL CERP PROJECTS	**$ 60,552,848**	**$ 60,322,848**	**$ 21,926,730**	$ 82,249,578		$ 82,249,578		**$ 59,445,000**
C&SF:CERP:PLA:PROGRAM MANAGEMENT	$ 3,000,000	$ 1,834,000		$ 1,834,000		$ 1,834,000		$ 2,000,000
C&SF:CERP:PLA:RECOVER	$ 1,400,000	$ 1,400,000		$ 1,400,000		$ 1,400,000		$ 1,000,000
C&SF:CERP:AA&M	$ 4,000,000	$ 4,000,000		$ 4,000,000		$ 4,000,000		$ 3,750,000
C&SF:CERP:PLA:INFO & DATA MGMT	$ 400,000	$ 400,000		$ 400,000		$ 400,000		$ 200,000
C&SF:CERP:PLA:IMC	$ 750,000	$ 750,000		$ 750,000		$ 750,000		$ 500,000
C&SF:CERP:PLA:PUBLIC OUTREACH	$ 25,000	$ 25,000		$ 25,000		$ 25,000		$ 5,000
SUBTOTAL CERP PROGRAM LEVEL	**$ 9,575,000**	**$ 8,409,000**	**$ -**	$ 8,409,000	**$ -**	$ 8,409,000		**$ 7,455,000**
GRAND TOTAL CERP	**$ 70,127,848**	**$ 68,731,848**	**$ 21,926,730**	**$ 90,658,578**	**$ -**	**$ 90,658,578**		**$ 66,900,000**
GRAND TOTAL C&SF (includes CERP)	**$ 73,700,000**	**$ 74,072,000**	**$ 21,926,730**	**$ 95,998,730**	**$ 1,704,000**	**$ 97,702,730**		**$ 66,900,000**
SFER TOTAL	**$ 76,500,000**	**$ 76,500,000**	**$ 28,926,730**	**$ 105,426,730**	**$ 1,704,000**	**$ 107,130,730**		**$ 67,500,000**

SFER Construction (C)

- SFER Construction budgets have declined from FY2017 to FY2019
- The Corps has used its reallocation authority to reallocate funds within the SFER Program
- The ability for the Army to ADAPT and be FLEXIBLE to changes in the SFER Program is essential to implementing the Program efficiently
- Reallocations are done to address changed conditions in project lead, changed conditions due to weather (Hurricane Irma), contract modifications, and differing site conditions

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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

FY18 Allocations & FY19 PBUD – O&M

	FY18 ORIGINAL NEED FOR O&M	FY17 WORK PLAN FOR FY18	FY18 WORK PLAN	FY18 TOTAL ALLOCATION		FY19 ORIGINAL NEED FOR O&M	FY19 PBUD Jsheet
C&SF:SOUTH DADE COUNTY (C-111)	$ 1,500,000	$ 684,000	$ 816,000	$ 1,500,000		17,873,000.00	
C&SF PROGRAM MANAGEMENT	$ 1,197,000	$ 1,110,000	$ 87,000	$ 1,197,000		1,197,000.00	
C&SF: MANATEE PASS GATES	$ 299,000	$ 224,000	$ 75,000	$ 299,000		550,000.00	
SUBTOTAL C&SF (Non-CERP)	$ 2,996,000	$ 2,018,000	$ 978,000	$ 2,996,000		$ 19,620,000	
C&SF:CERP:INDIAN RIVER LAGOON - SOUTH	$ 120,000	$ -	$ 120,000	$ 120,000		16,000.00	
C&SF:CERP:PICAYUNE STRAND	$ 2,282,000	$ -	$ 2,282,000	$ 2,282,000		951,000.00	
C&SF:CERP:BBCW	$ 75,000	$ -	$ 75,000	$ 75,000		267,000.00	
C&SF:CERP: SITE 1	$ 150,000	$ -	$ 37,000	$ 37,000		69,000.00	
C&SF:CERP:C-111 Spreader Canal	$ 85,000			$ -			
C&SF:CERP:MELALEUCA ERADICATION	$ 293,000	$ -	$ 293,000	$ 293,000		358,000.00	-
SUBTOTAL CERP	$ 3,005,000	$ -	$ 2,807,000	$ 2,807,000		$ 1,661,000	
MWD	$ 1,415,000	$ 751,000	$ 777,000	$ 1,528,000		2,731,000.00	
E&SF:SBC	$ 191,000	$ 63,000	$ 128,000	$ 191,000		750,000.00	
SFER TOTAL	$ 7,607,000	$ 2,832,000	$ 4,690,000	$ 7,522,000		$ 24,762,000	$ -

- FY appropriation does not fund all SFER O&M requirements
- The Corps will not be able to satisfy the legal requirements of existing Biological Opinions in FY2019, based on the current budget in the FY2019 J-Sheet
- Federal Government has a statutory requirement to pay its share of SFER O&M
  - The Federal Government has executed Project Partnership Agreements agreeing to pay for its portion of O&M or OMRR&R
- The SFWMD budgets their OMRR&R efforts based on the legal agreements with the Federal Government
  - If the Federal Government does not pay its share of OMRR&R, the SFWMD does not have the funding needed to perform all OMRR&R

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Key Take Aways

Strong Federal Interest

Strategic Partnerships

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

Continued Administration and Congressional Funding

www.evergladesrestoration.gov

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SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

SFER Task Force

Howard Gonzales Jr.

U.S. Army Corps of Engineers, Jacksonville District

25 July 2018

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