

SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

SFER Joint Working Group (WG) and Science Coordination Group (SCG) Meeting

Howie Gonzales
Programs and Project Management Division
U.S. Army Corps of Engineers, Jacksonville District

19 May 2021

Working Today to Build a Better Tomorrow



US Army Corps
of Engineers®





SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Agenda

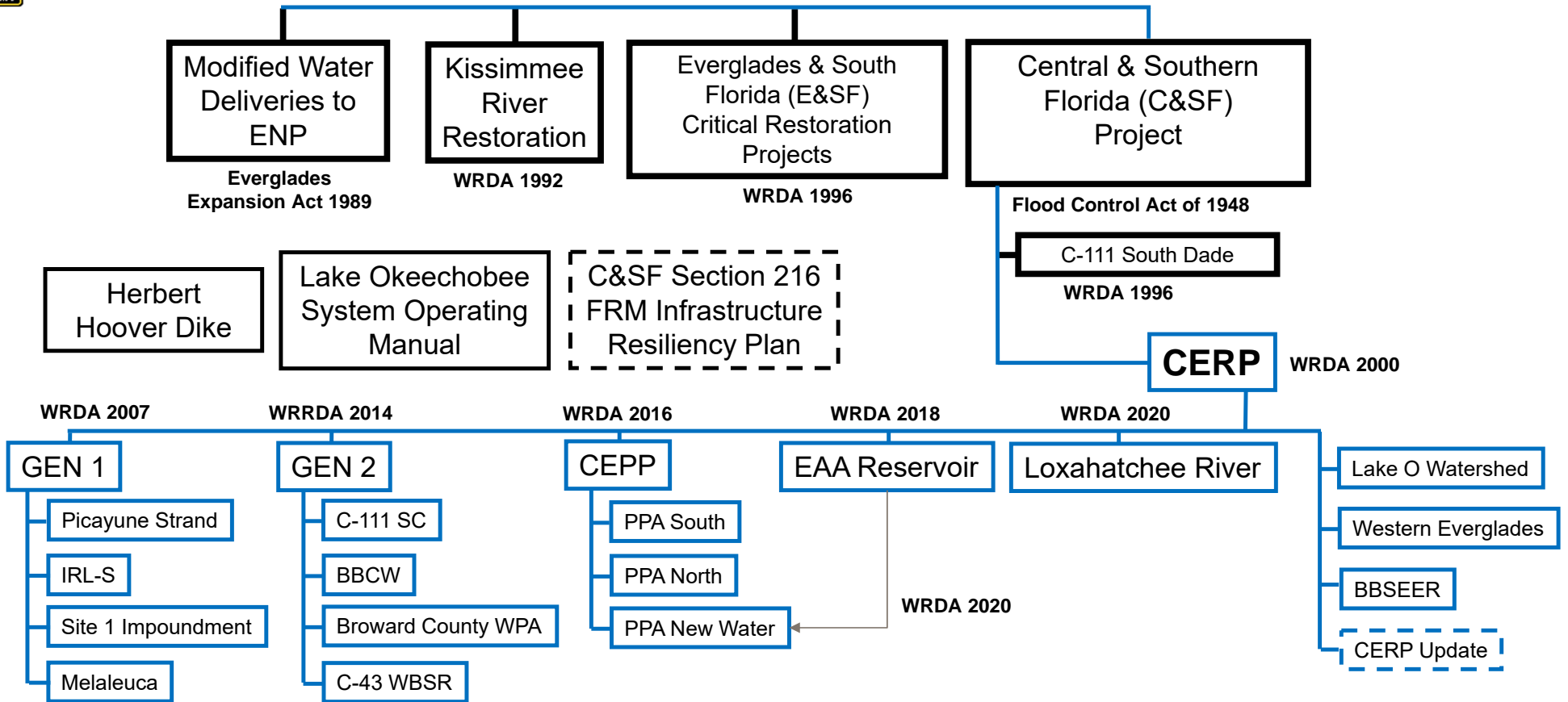


- ▶ Program Structure
- ▶ FY21 Budget
- ▶ Integrated Delivery Schedule (IDS)
- ▶ Planning
 - Lake Okeechobee Watershed Restoration Project (LOWRP)
 - Western Everglades Restoration Project (WERP)
 - Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER) Project
- ▶ Design/Construction
 - Kissimmee River Restoration (KRR)
 - C-111 South Dade (C-111SD)
 - Picayune Strand Restoration (PSRP)
 - Indian River Lagoon – South (IRL-S)
 - Biscayne Bay Coastal Wetlands (BBCW)
 - Central Everglades Planning Project (CEPP)
 - Everglades Agricultural Area (EAA) Reservoir
- ▶ Operations
 - Modified Water Deliveries, Combined Operational Plan (COP)
 - Lake Okeechobee System Operating Manual (LOSOM)

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM Program Structure



CERP – Comprehensive Everglades Restoration Plan
GEN – Generation; linked to Authorization
CEPP – Central Everglades Planning Project

Legislation Dates = Original Authorization Date **Working Today to Build a Better Tomorrow**



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM FY21 Budget

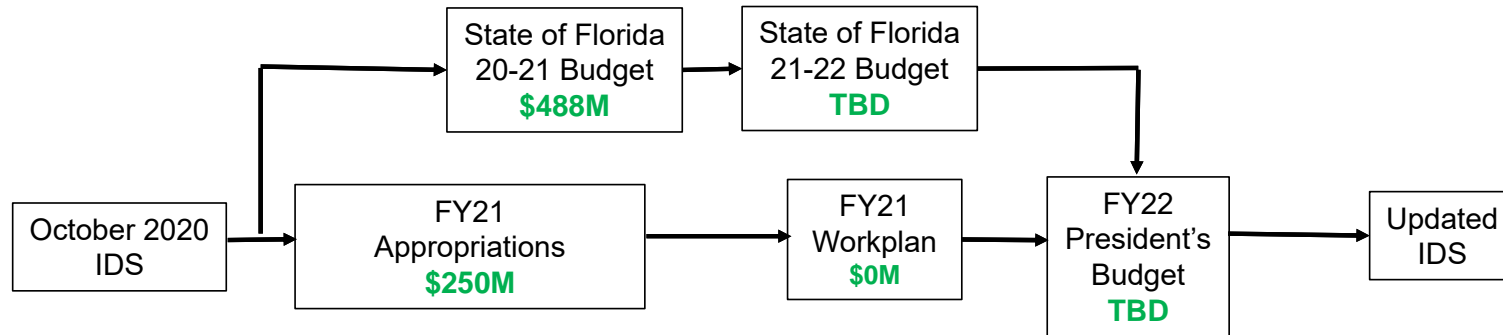


CONSTRUCTION		OPERATIONS & MAINTENANCE
\$83M	FY20 Carryover	\$0
\$250M	FY21 President's Budget	\$10.052M
\$0	FY21 Workplan	\$0
\$333M	FY21 Available	\$10.052M
TBD	FY22 President's Budget	TBD

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Integrated Delivery Schedule (IDS)



- May 2021 – Release of Federal FY22 President’s Budget
- Early Summer 2021 – Release of State of Florida’s FY22 Budget
- Summer 2021 – USACE and SFWMD update IDS
- September 2021 – “ASK” for SFER Task Force Working Group-sponsored workshop
- Fall 2021 – SFER Task Force Meeting and presentation of IDS Update

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM PLANNING



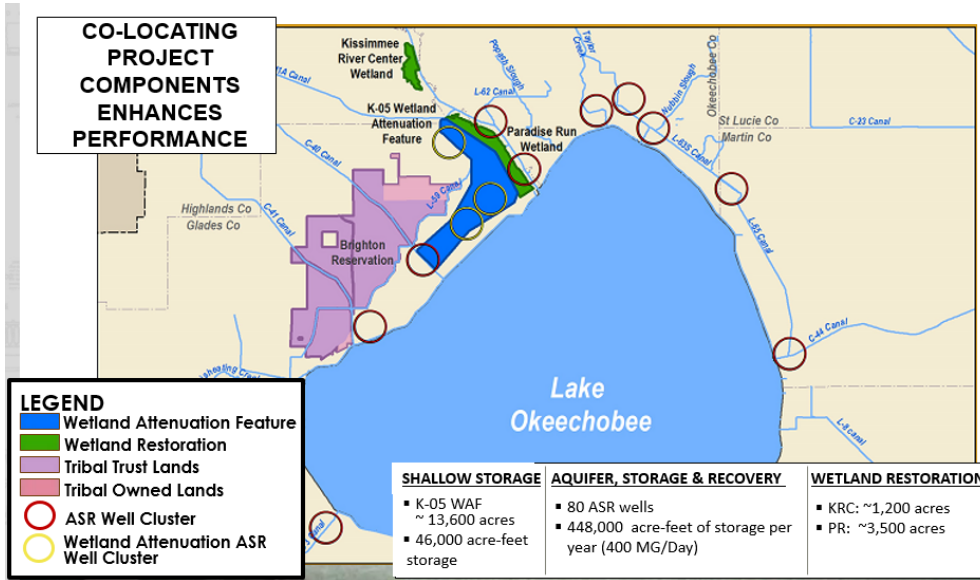
- ▶ Lake Okeechobee Watershed Restoration Project (LOWRP)
- ▶ Western Everglades Restoration Project (WERP)
- ▶ Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER) Project

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Lake Okeechobee Watershed Restoration Project (LOWRP)

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.

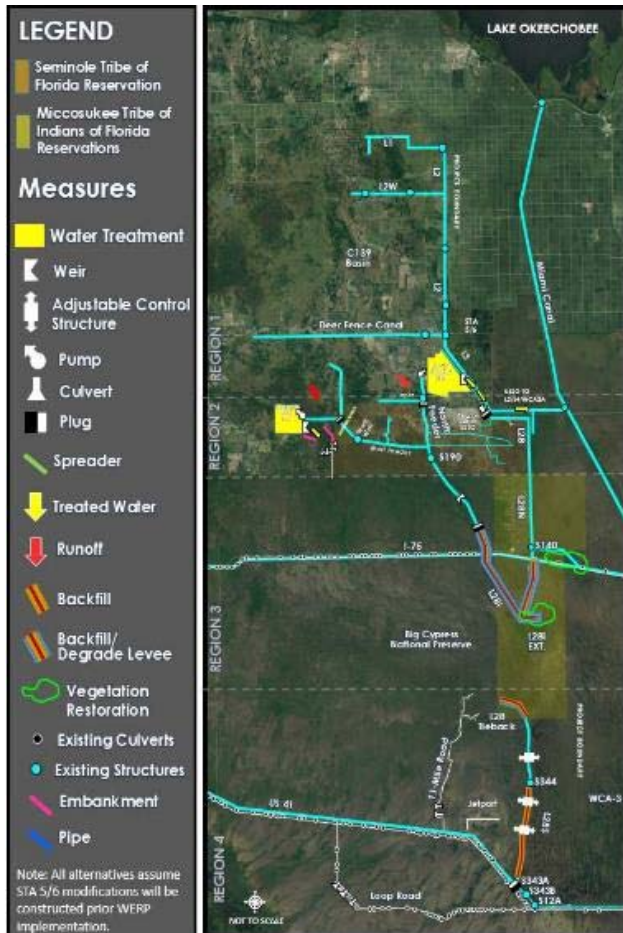
Status:

- Project Implementation Report (PIR) on hold
- Study paused in January 2021
- Updating study scope, schedule, and cost

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Western Everglades Restoration Project (WERP)



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:

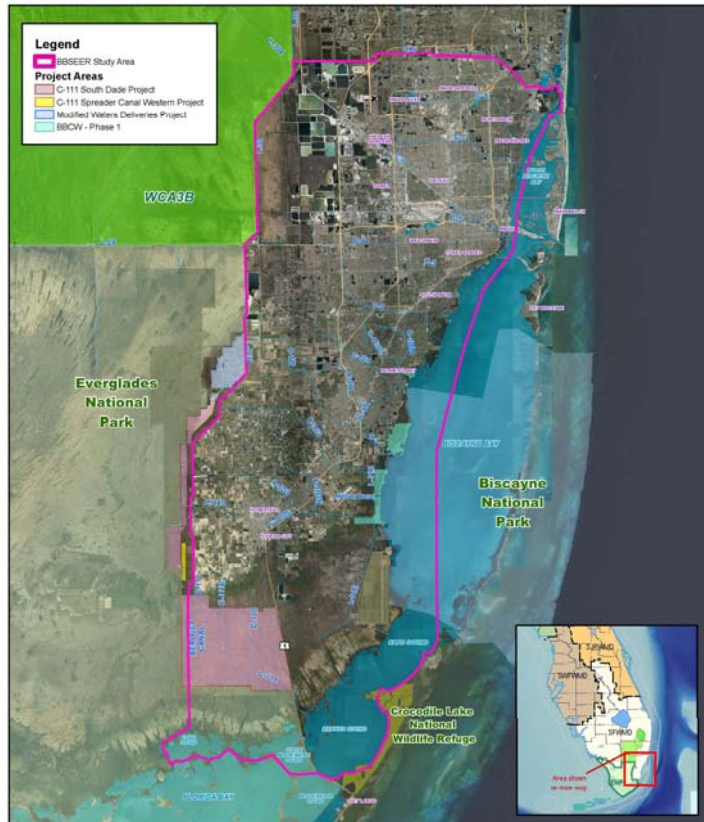
- Project briefed to SFER Task Force on 29 October 2019 with notification of SAJ's intention to terminate
- Letters of study support received from SFWMD, FDEP, DOI, NPS, STOF, and MTOIF; follow-up meeting conducted February 2020
- Study reinitiated in March 2020
- Study paused in December 2020
- Pursuing 2nd SMART Planning exception

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER)



The goals and objectives of the project:

Restore ecological conditions in the Model Lands, Southern Glades, and coastal wetlands

Restore conditions in the nearshore zones of Biscayne Bay, Card Sound, Barnes Sound, and Manatee Bay

Improve ecological and hydrological connectivity between Biscayne Bay coastal wetlands, the Model Lands, and Southern Glades

Increase resiliency of coastal habitats in southeastern Miami-Dade County to sea level change

Status:

- Study initiation: 15/16 September – NEPA Scoping Meetings
- Alternatives Milestone Meeting – March 2021
- SMART Planning exception required

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM DESIGN / CONSTRUCTION



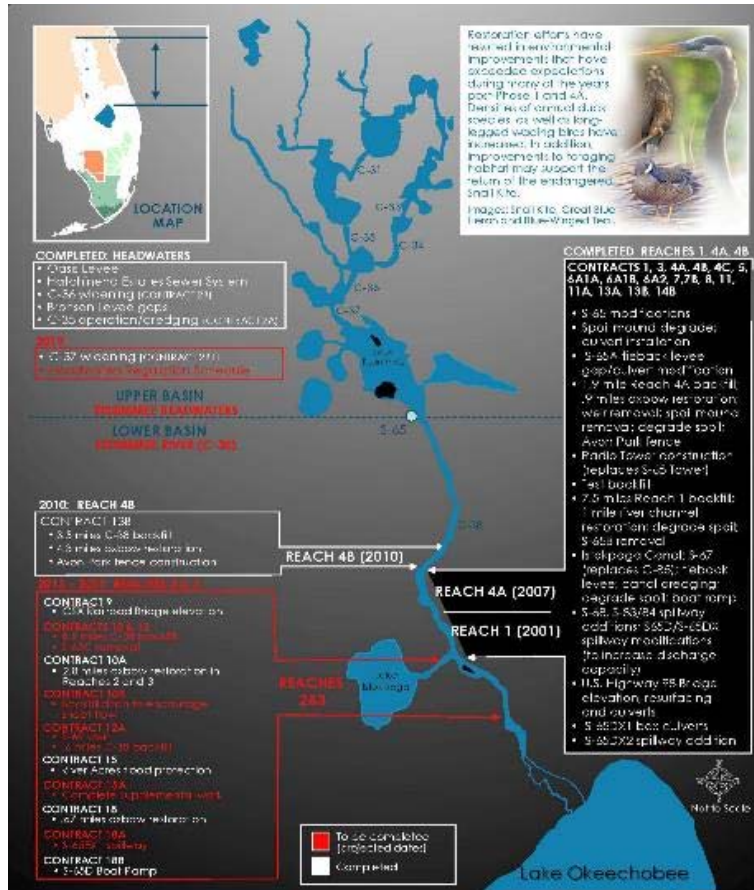
- ▶ Kissimmee River Restoration (KRR)
- ▶ C-111 South Dade (C-111SD)
- ▶ Picayune Strand Restoration (PSRP)
- ▶ Indian River Lagoon – South (IRL-S)
- ▶ Biscayne Bay Coastal Wetlands (BBCW)
- ▶ Central Everglades Planning Project (CEPP)
 - CEPP South Phase
 - Everglades Agricultural Area (EAA) Phase

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Kissimmee River Restoration (KRR)



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.

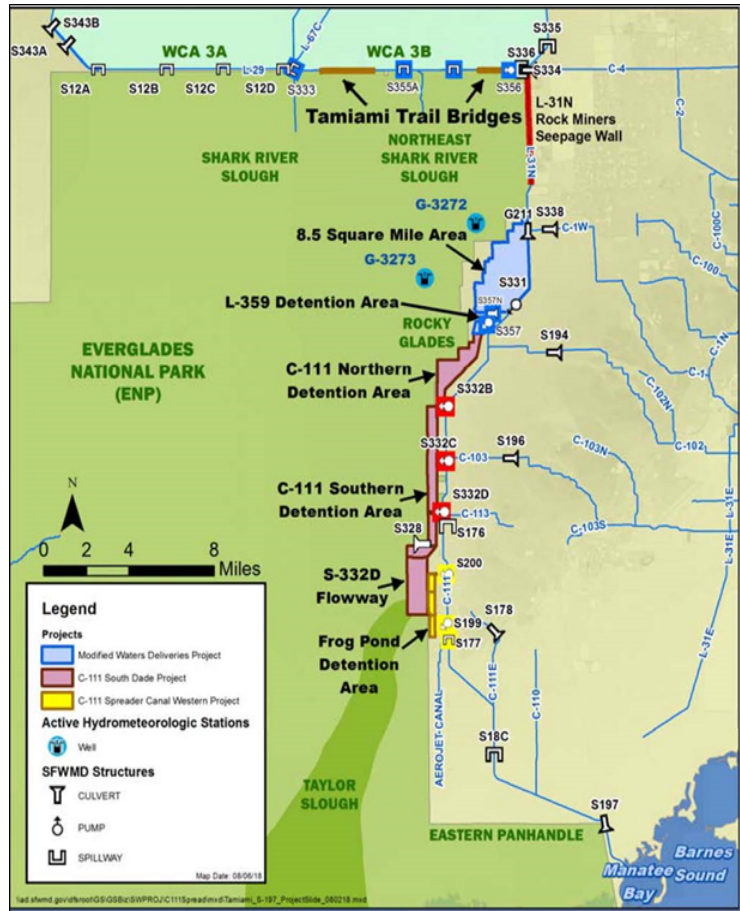
Status:

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

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Canal 111 (C-111) South Dade



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

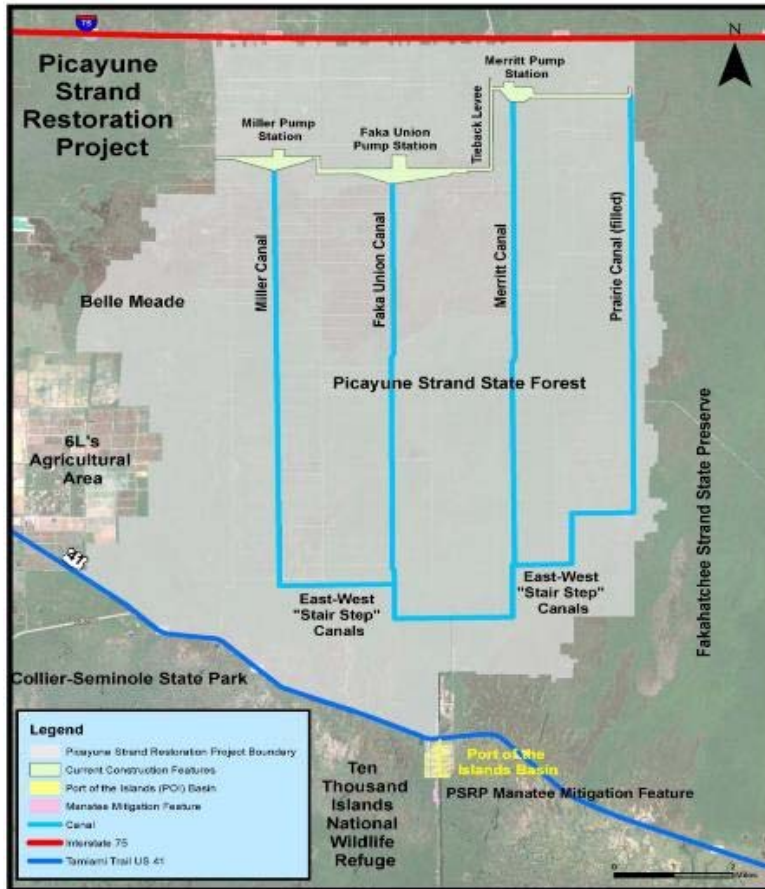
- Construction complete!
- Post authorization change report (PACR) to address temporary pump stations and O&M Cost Share is COMPLETE!
- Director's Report – September 2020
- AUTHORIZED in WRDA 2020!!!
- Design ongoing; construction scheduled for 2023.

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Picayune Strand Restoration Project (PSRP)

13



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:

- Pump Stations complete and transferred to SFWMD for Operations & Maintenance
- Road removal and canal plugging ongoing
- Southwest Protection and Conveyance Features construction initiated
- Construction completion scheduled for 2024

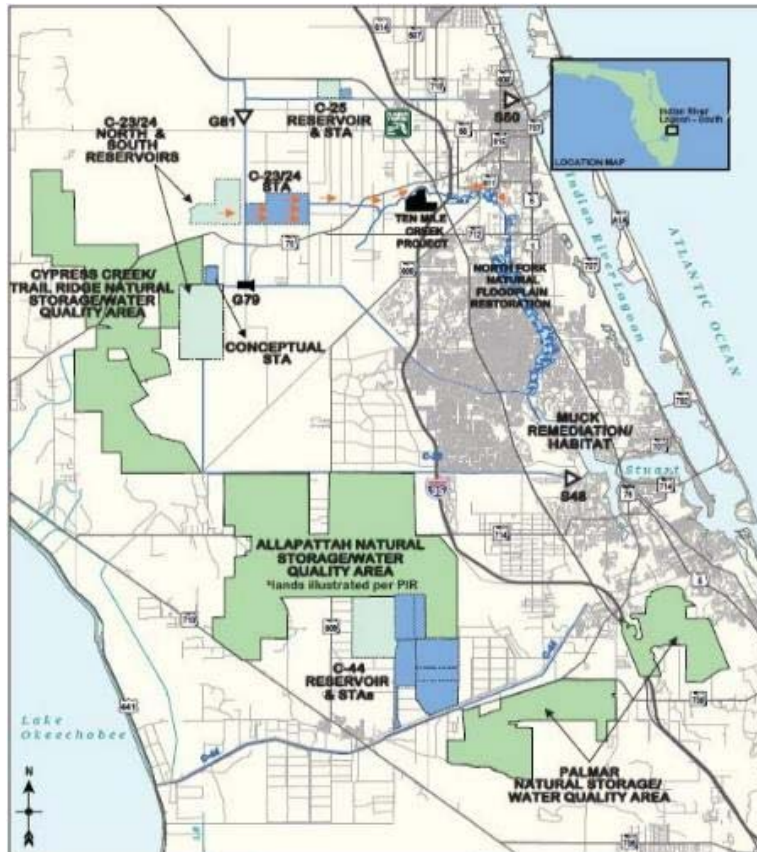
Working Today to Build a Better Tomorrow

13



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Indian River Lagoon - South

14



The Indian River Lagoon and St. Lucie Estuary are two of the country's most productive and most threatened estuaries; the project will reconnect and restore natural areas 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 wetlands
- 889 acres of restored oyster habitat
- 922 acres of submerged aquatic vegetation restored

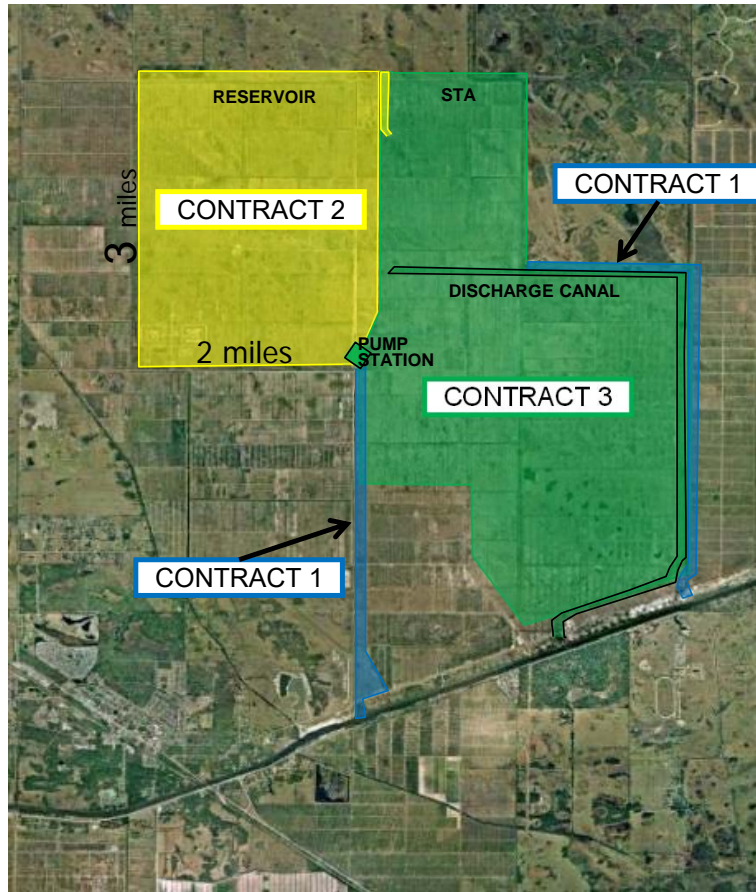
Status:

- C-44 construction completion in summer 2021
- C-23/24 construction initiation in 2021
- Post Authorization Change Report (PACR) initiation in 2021

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM 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	Complete
Pump Station	Complete
OTMP (2-years) – Operational Testing and Monitoring	Following Construction Completion

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Indian River Lagoon – South: C-44 Reservoir / STA

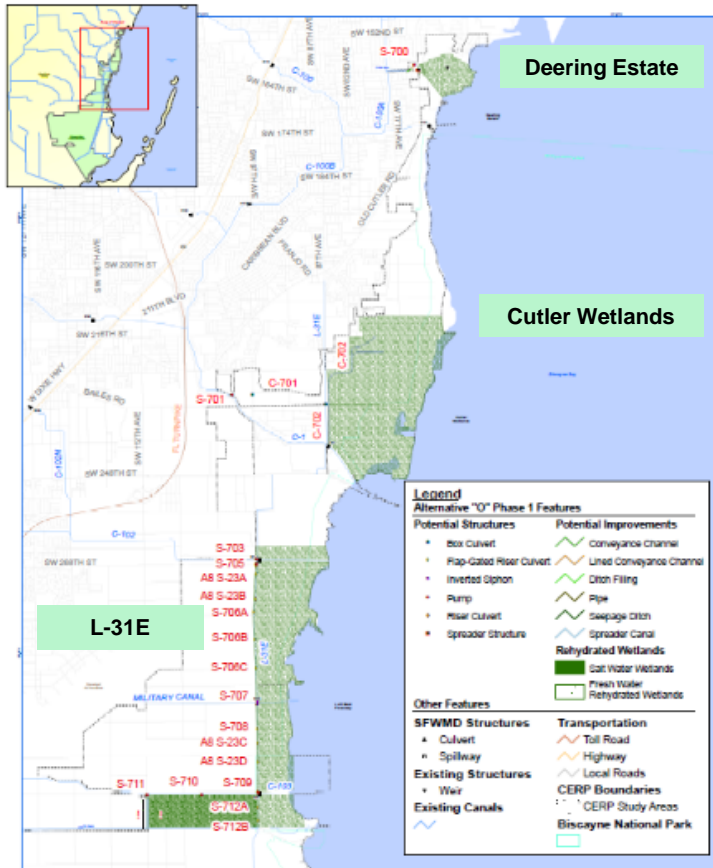


Construction Completion = Summer 2021!

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Biscayne Bay Coastal Wetlands (BBCW)



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

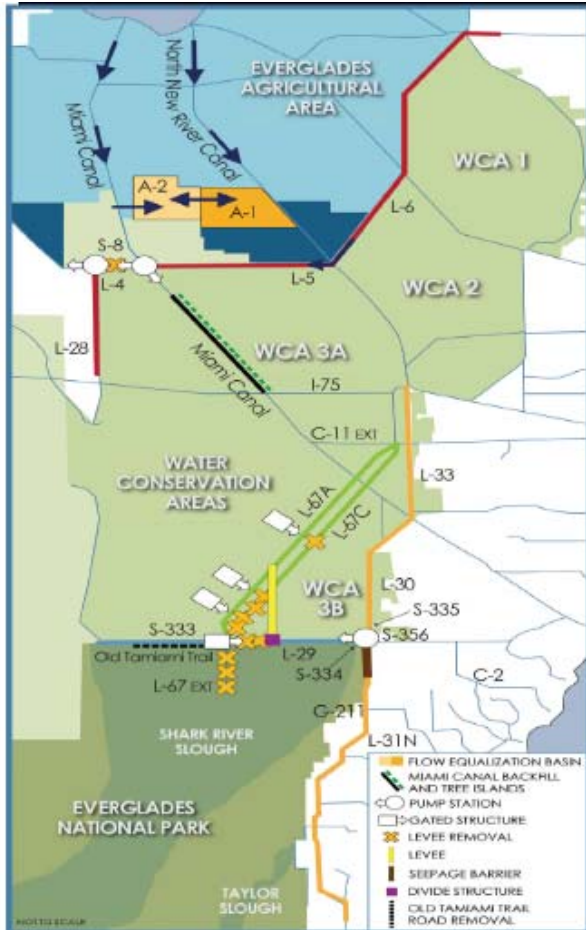
Status:

- Deering Estate = Construction complete
- L-31 East = USACE and SFWMD constructing portions
 - USACE construction contract awards in 2020 and 2021
 - SFWMD construction complete
- Cutler Wetlands = SFWMD completing design with construction initiation in 2021/2022

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM 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, and retaining water within Everglades National Park

Status:

- CEPP South Phase
 - Project Partnership Agreement (PPA) executed 27 July 2020
 - SFWMD engaging design and construction of features
 - SAJ construction contract awarded in September 2020
 - Construction underway
- Initiated CEPP North Validation Report in October 2020; scheduled for completion in 2021

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Central Everglades Planning Project (CEPP) Everglades Agricultural Area (EAA) Phase



Everglades Agricultural Area (EAA) Features:

- A-2 Reservoir: 10,500 acres with 240,000 acre-foot storage at ~23 feet deep
- A-2 Stormwater Treatment Area (STA): 6,500 acres
- Adds 160,000 to CEPP's 210,000 for a total of 370,000 average annual acre-feet of new water flowing through to the central Everglades

The purpose of Everglades Agricultural Area (EAA) is to improve the quantity, quality, timing, and distribution of water flows to the central Everglades (Water Conservation Area 3 (WCA-3) and Everglades National Park (ENP)).

Status:

- Authorized in WRDA 2018 (Section 1308)
- Reauthorized in WRDA 2020 as a modification of CEPP
- PPA executed 29 April 2021!!!
- SFWMD design and construction efforts ongoing (initiated 20 April 2020)
- USACE design efforts ongoing; construction contract award scheduled for 2021

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM OPERATIONS



- ▶ Modified Water Deliveries, Combined Operational Plan (COP)
- ▶ Lake Okeechobee System Operating Manual (LOSOM)

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Modified Water Deliveries to Everglades National Park



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

- Combined Operational Plan (COP) is COMPLETE and underway!
- Record of Decision signed 28 August 2020

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Lake Okeechobee System Operating Manual (LOSOM)



GOALS AND OBJECTIVES

Goal: Incorporate flexibility in Lake Okeechobee operations while balancing congressionally authorized project purposes.



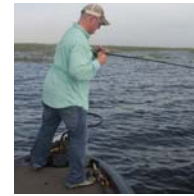
Flood Control



Water Supply



Navigation



Recreation



Preservation of Fish & Wildlife

- **Objective 1.** Manage risk to public health and safety, life and property
- **Objective 2.** Continue to meet authorized purposes for navigation, recreation and flood control
- **Objective 3.** Improve water supply performance
- **Objective 4.** Enhance ecology in Lake Okeechobee, northern estuaries and across the south Florida ecosystem.

Working Today to Build a Better Tomorrow



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Lake Okeechobee System Operating Manual (LOSOM)



SCHEDULE



MILESTONE	DATE
Scoping Meetings (complete)	February - March 2019
Plan Formulation & Performance Evaluation Finalized	June 2020
Evaluation of Alternative Lake Schedules	July 2020 – September 2021
Draft NEPA Document Release	January 2022
Final NEPA Document Release	July 2022
Record of Decision (ROD)	October 2022

- MAY 2021**
 - PDT Meeting –Balanced Alternative Array 7MAY21
 - Iteration 2 Balanced Alternative Iterative Modeling
 - Sub-team Discussions on Evaluation Process (as needed)
- JUNE 2021**
 - PDT Meeting –Iteration 2 Data TBD
 - Evaluation of Balanced Lake Schedules
 - Sub-team meetings to Support Evaluation
- JULY 2021**
 - PDT Meeting -Finalize Iteration 2 Evaluation TBD
 - Selection of Preferred Lake Schedule Alternative
 - Begin Iteration 3 Optimization

Working Today to Build a Better Tomorrow

SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

SFER Joint Working Group (WG) and Science Coordination Group (SCG) Meeting

Howie Gonzales
Programs and Project Management Division
U.S. Army Corps of Engineers, Jacksonville District

19 May 2021

Working Today to Build a Better Tomorrow



US Army Corps
of Engineers®

