

SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

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28 January 2021

Working Today to Build a Better Tomorrow



US Army Corps
of Engineers®





SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Agenda



Program Items

- ▶ 2020 Report to Congress
- ▶ CISRERP 2020 Report
- ▶ Periodic CERP Update

Project Items: FY20 Execution Focus

- ▶ Budget
- ▶ Planning
 - Loxahatchee River Watershed Restoration Project (LRWRP)
 - C-43 West Basin Storage Reservoir
 - 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)
 - CEPP Everglades Agricultural Area (EAA) Reservoir
- ▶ Operations
 - Lake Okeechobee System Operating Manual (LOSOM)



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM 2020 Report to Congress



- COMPLETE! Report transmitted on 4 January 2021!
- This is our fourth Report to Congress and it documents the significant progress made between July 1, 2015 and June 30, 2020.
- The 2020 report focuses on the momentum achieved since the last report by federal, state, local, and tribal governments that partnered to move key restoration programs and plans forward, including new construction starts, project completions, accelerated planning efforts, and record-breaking levels of federal and state funding.
- <https://www.saj.usace.army.mil/CERP-Report-to-Congress/>



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM CISRERP 2020 Report



CISRERP 2020-2025 Path

- Memorandum of Agreement (MOA)
 - Implementing Parties - Department of Interior (DOI), USACE, and State of Florida
 - EXECUTED on 17 November 2020!
 - Current agreement for period of 5 years through November 2025
- Cooperative Agreement (CA)
 - Implementing Parties - National Academy of Sciences (NAS) and USACE
 - Budget = \$1,691,000
 - Scope includes the completion of 2020, 2022 and 2024 report cycles
 - EXECUTED on 17 December 2020!

CISRERP 2020 report being finalized for release in ~March 2021



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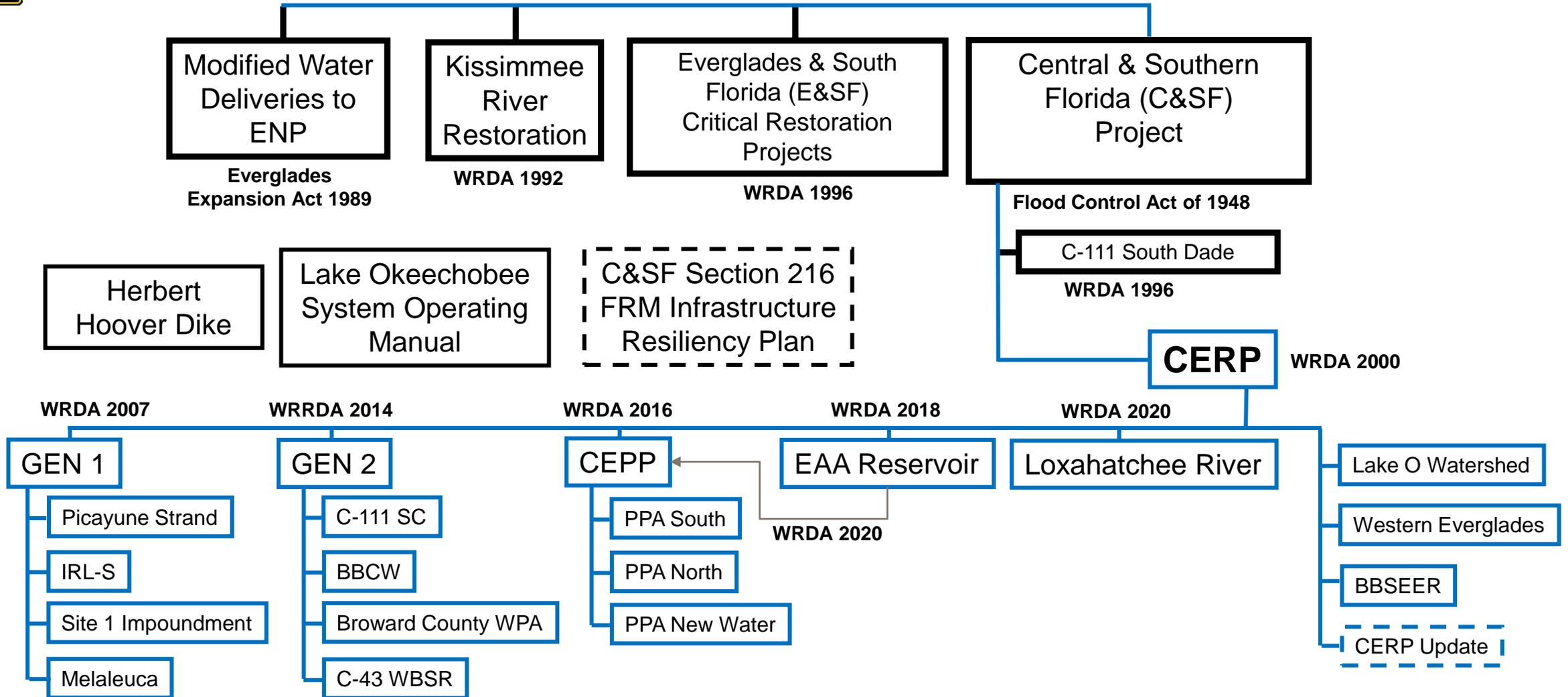
Periodic Comprehensive Everglades Restoration Plan (CERP) Update

Periodic Comprehensive Everglades Restoration Plan (CERP) Update

- As defined in the Programmatic Regulations for CERP, a Periodic CERP Update is an evaluation of “the Plan” that is conducted periodically with new or updated modeling that includes the latest available scientific, technical, and planning information.
- The Initial CERP Update (ICU) was completed in 2005.
- This Periodic CERP Update will evaluate the progress of the completed portions of the plan, develop a full CERP model run in the Regional Simulation Model, inform the potential/upcoming 216 study for disposition of C&SF structures, and may identify improvements to system operation.
- The CERP Update is not intended to modify the authorization for CERP, i.e., a Comprehensive Plan Modification Report.
- Scoping of this effort will be initiated in February 2021.



SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM Program Structure



CERP – Comprehensive Everglades Restoration Plan

GEN – Generation; linked to Authorization

CEPP – Central Everglades Planning Project

Foundation Projects

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



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM WRDA 2020



- Water Resources Development Act (WRDA) 2020: Enacted 27 December 2020
- C-111 South Dade Post Authorization Change Report (PACR)
 - C-43 West Basin Storage Reservoir PACR
 - Loxahatchee River Watershed Restoration Project (LRWRP)
 - Everglades Agricultural Area (EAA) Reservoir reauthorized as modification of Central Everglades Planning Project (CEPP)
 - Seminole Big Cypress Critical Project deauthorized
 - Urges expedited completion of LOWRP and WERP
 - LOSOM – evaluation, coordination, and reporting



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM PLANNING

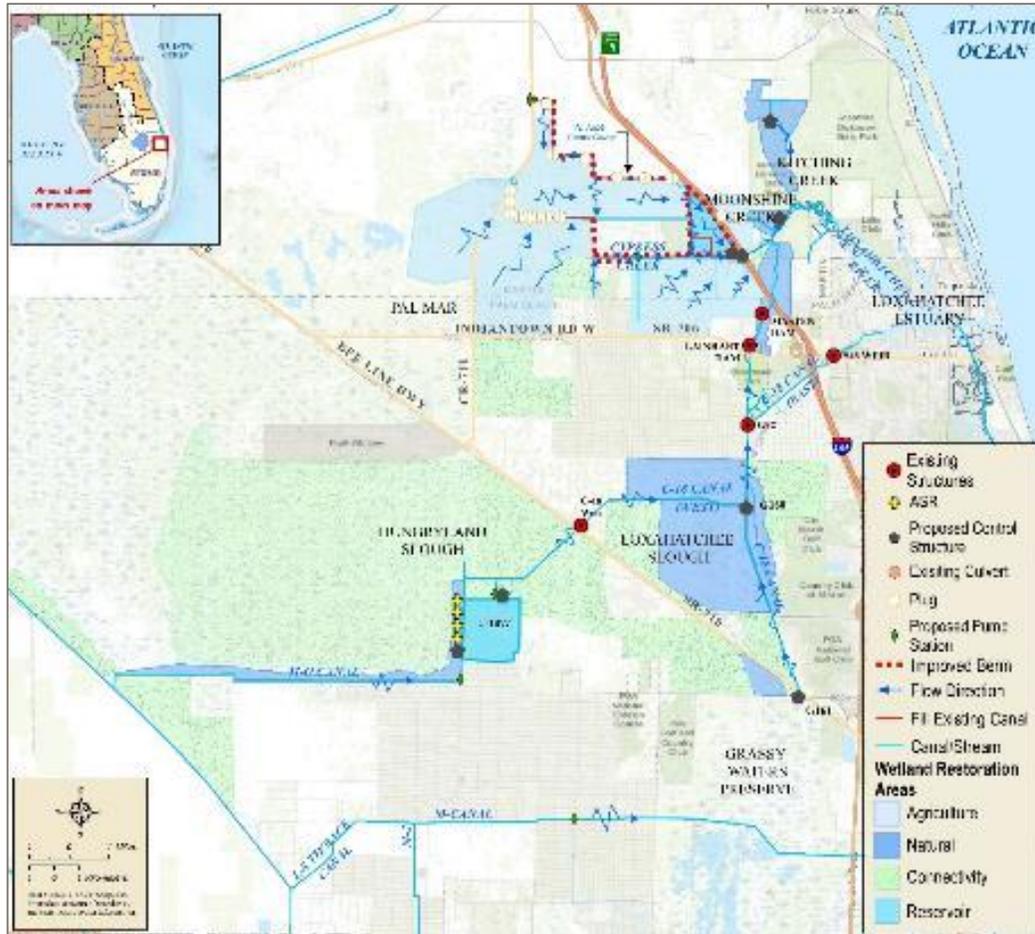


- ▶ Loxahatchee River Watershed Restoration Project (LRWRP)
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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Loxahatchee River Watershed Restoration Project (LRWRP)

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) is **COMPLETE!**
- Chief’s Report Signed – 8 April 2020
- **AUTHORIZED** in WRDA 2020!!!



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM Caloosahatchee River (C-43) West Basin Storage Reservoir



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

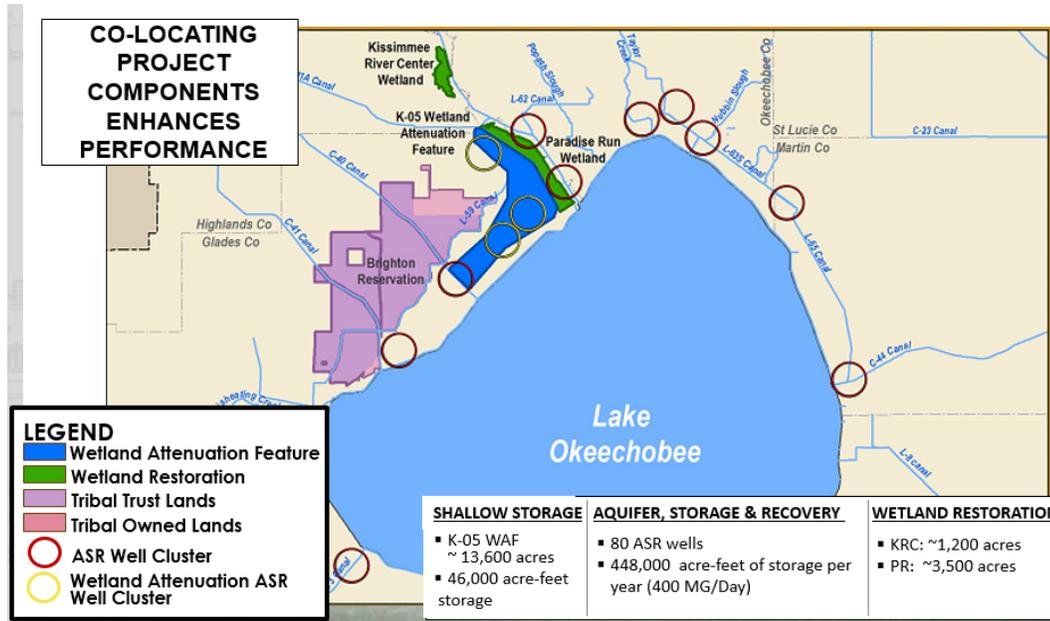
- SFWMD is designing and constructing project
- Construction completion in 2023
- Post authorization change report (PACR) to update Total Project Cost is COMPLETE!
- Director's Report signed – 24 July 2020
- AUTHORIZED in WRDA 2020!!!



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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.

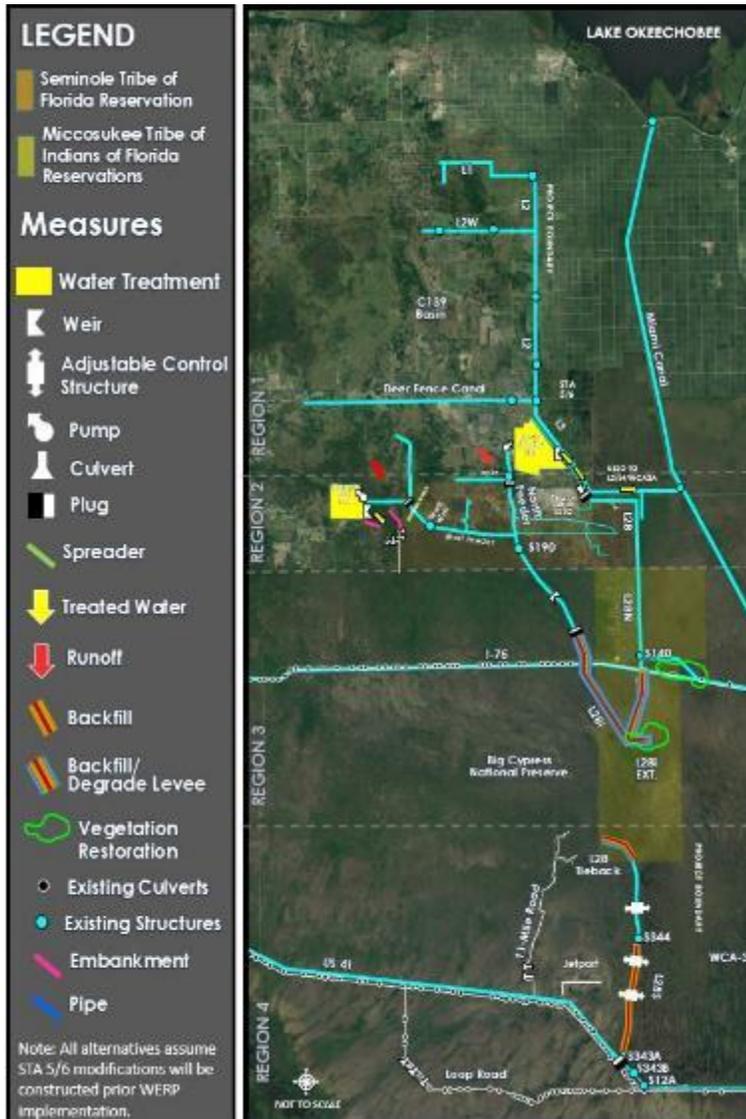
Status:

- Project Implementation Report (PIR) in final stages of development
- Final Public Review (PIR/EIS) – August 2020
- State & Agency Review (Chief's Report) – September 2020
- Chief's Report Completion – 2021
- WRDA 2022 Consideration



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.

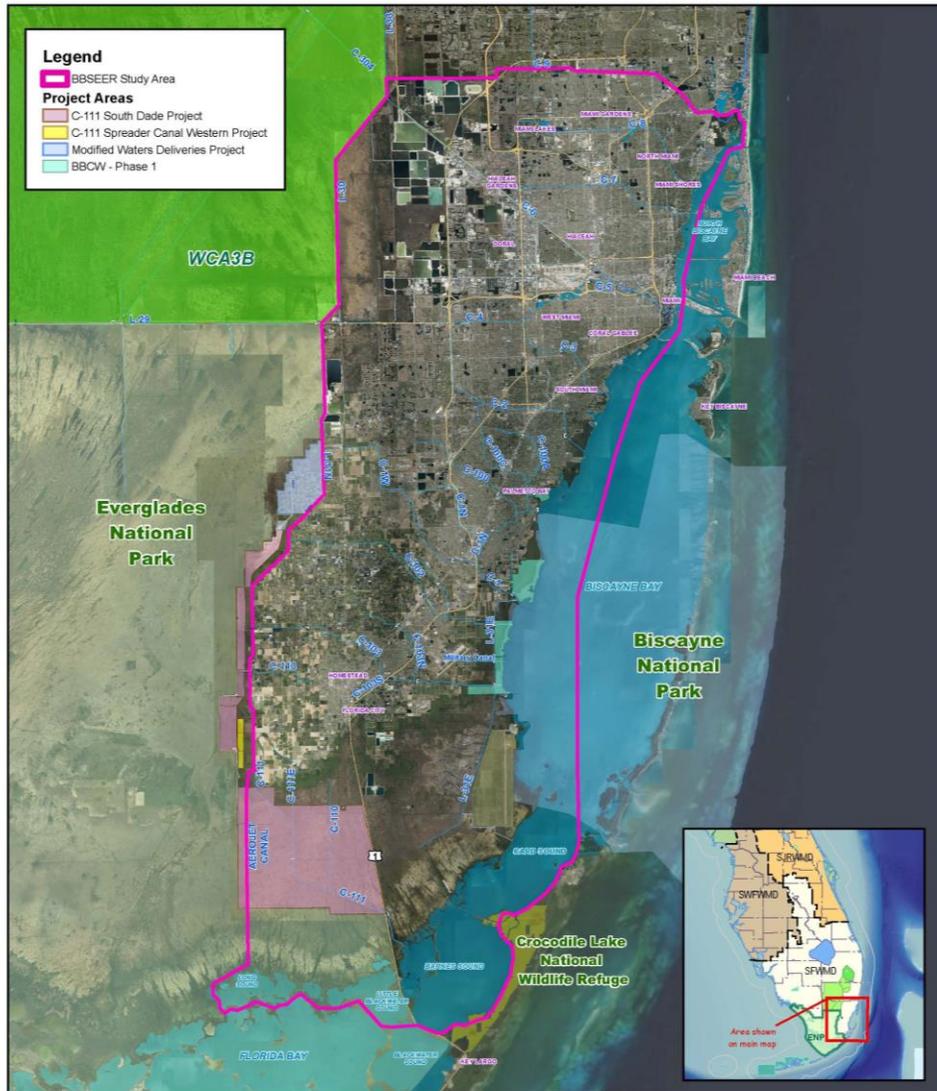
Status:

- 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 efforts paused while seeking 2nd SMART Planning Waiver request for additional study time (21 months) and budget (\$3.2M)
- WRDA 2022 Consideration



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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:

- Project Management Plan (PMP) COMPLETE!
- Study initiation: 15/16 September – NEPA Scoping Meetings
- Alternatives Milestone Meeting – March 2021
- SMART Planning Waiver anticipated



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM DESIGN / CONSTRUCTION

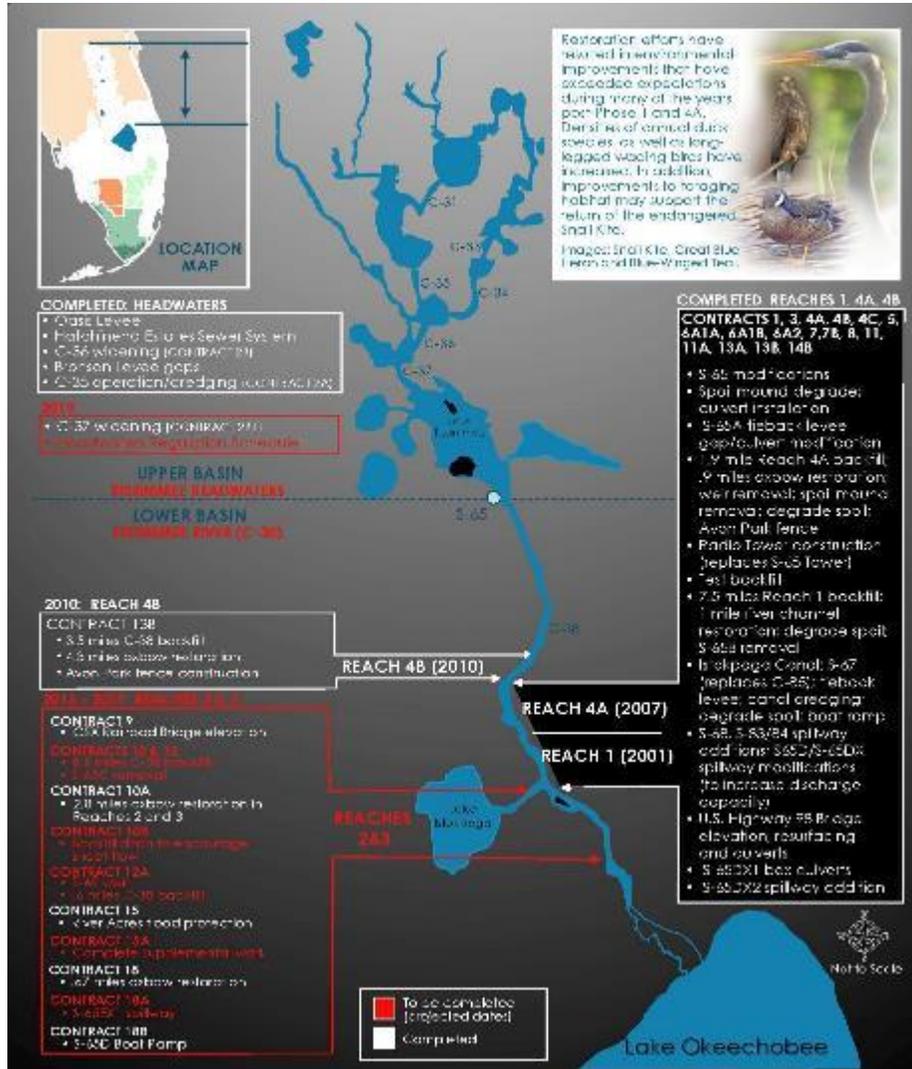


- ▶ Kissimmee River Restoration (KRR)
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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

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.

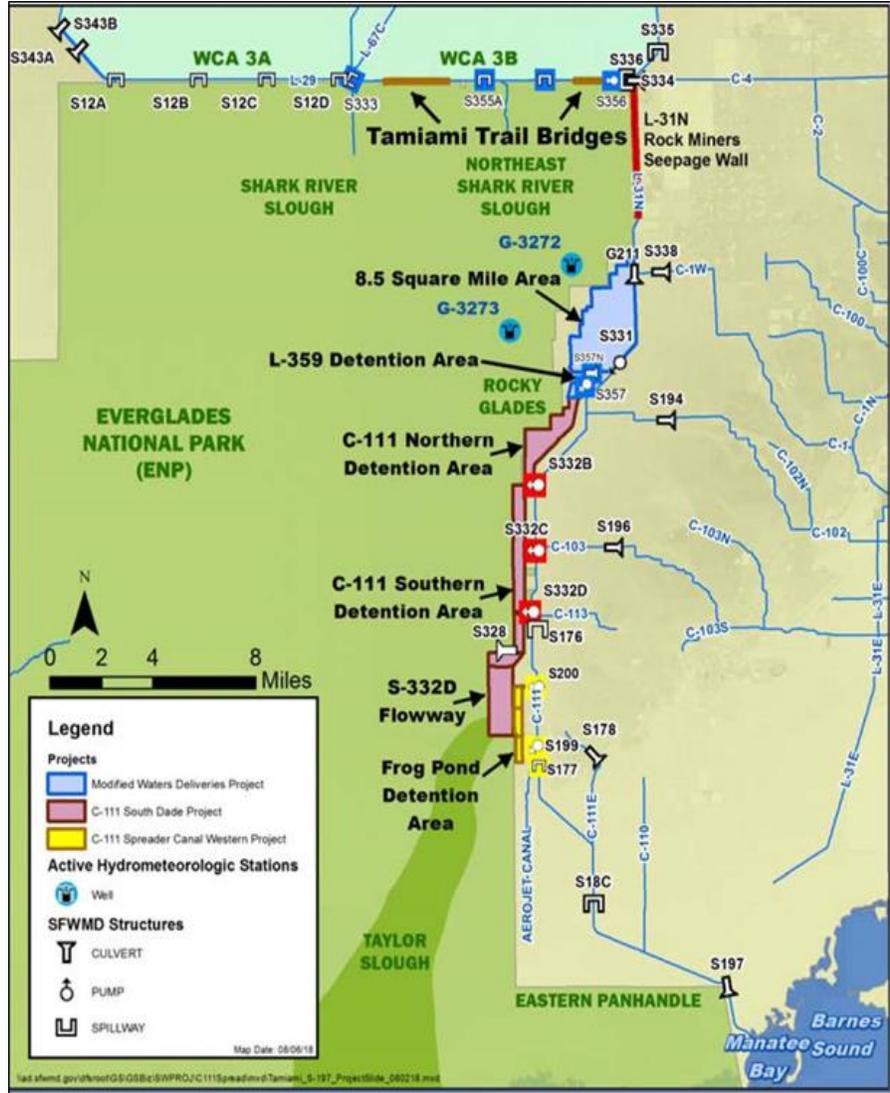
Status:

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



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Canal 111 (C-111) South Dade



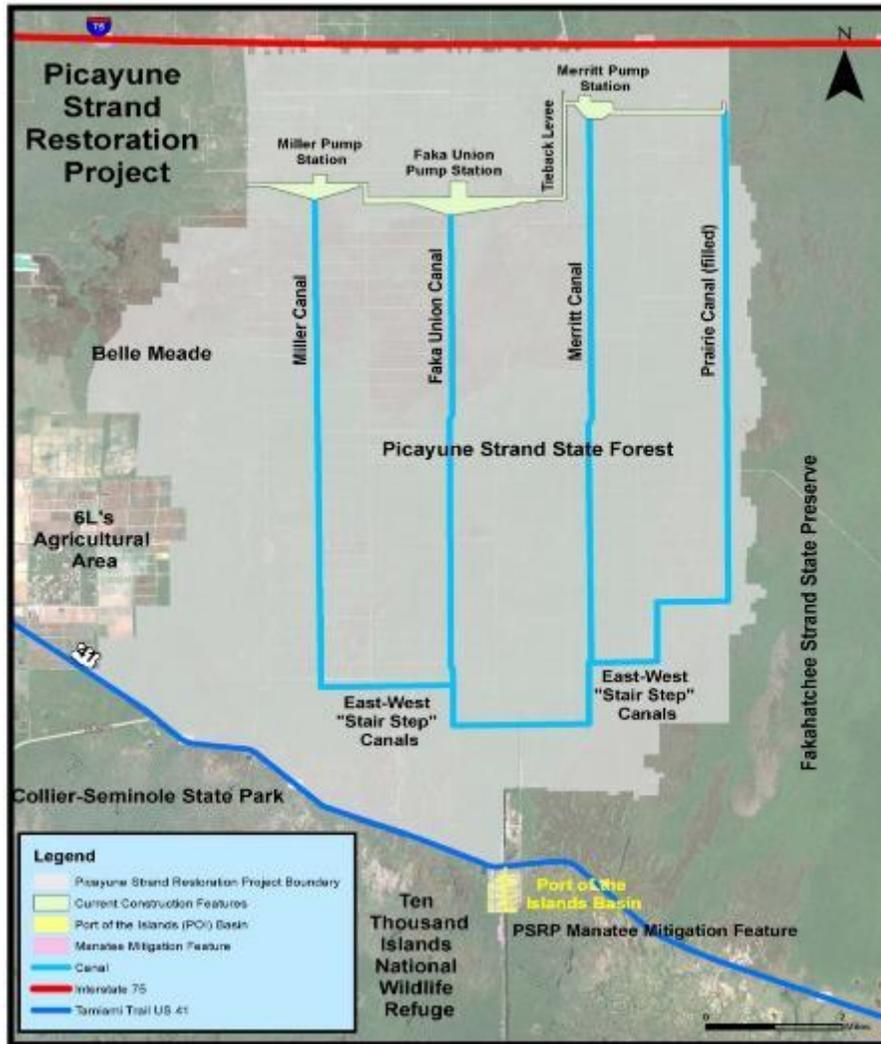
Reduces water losses from Everglades National Park and improves freshwater flow to Taylor Slough and Florida Bay. Provides for 9,500 acre-feet of storage & seepage that reduces damaging canal discharges to Barnes Sound, reduces seepage losses from ENP, and maintains flood protection for commercial, residential, 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!!!

SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Picayune Strand Restoration Project (PSRP)



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

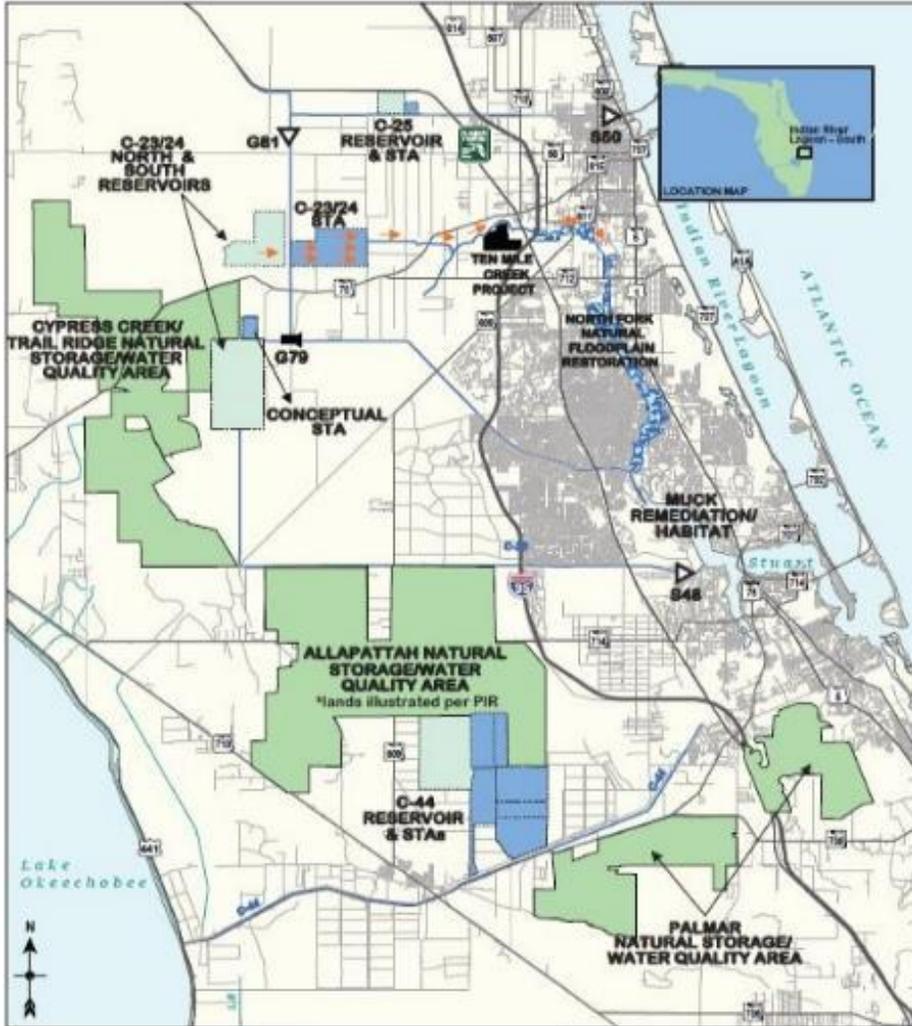
Status:

- Pump Stations complete and transferred to SFWMD for Operations & Maintenance
- Road removal and canal plugging ongoing
- Southwest Protection Features construction contracts awarded in September 2020



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Indian River Lagoon - South



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
- 7.9 million cubic yards of muck removed

Project Features:

- C-44 Reservoir and Stormwater Treatment Area
- C-23/24 Reservoirs and Stormwater Treatment Area
- C-25 Reservoir and Stormwater Treatment Area
- Natural Lands / Muck Removal



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	Ongoing
Pump Station	Complete
OTMP (2-years) – Operational Testing and Monitoring	Following Construction Completion



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

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



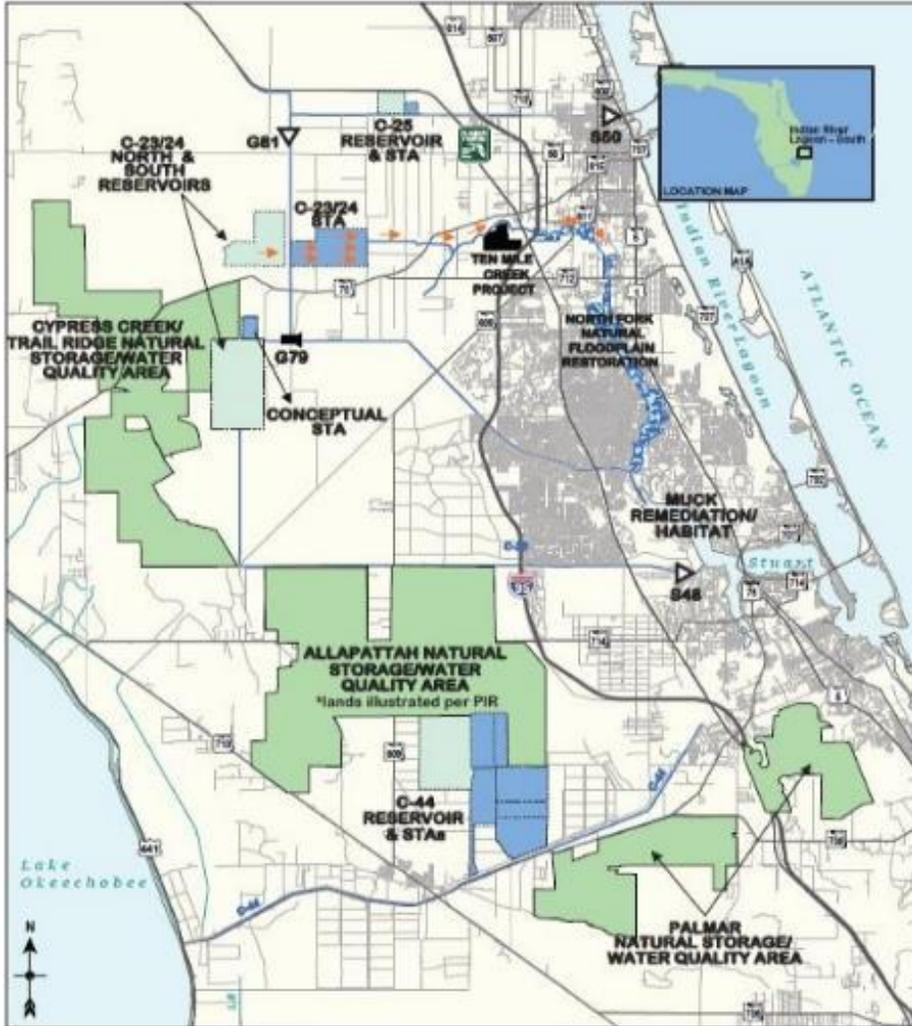
Construction Completion = Summer 2021!

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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Indian River Lagoon – South: C-23/24 Reservoir / STA & Phase 2



C-23/24 Reservoir and STA Status:

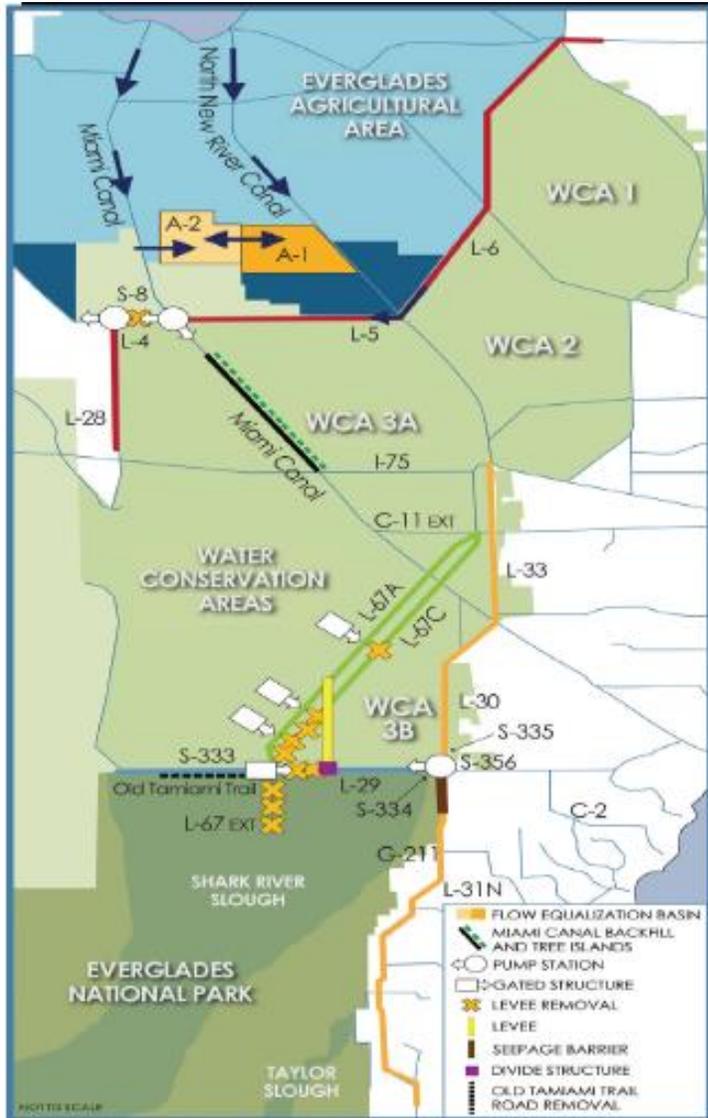
- Design of Stormwater Treatment Area (STA) ongoing; Construction contract award scheduled for September 2021
- Environmental Assessment (EA) scheduled for public review in March 2021
- Design of North Reservoir continues with construction contract award scheduled for 2022 (pending appropriations)

Phase 2 Status:

- Phase 2 consists of natural water quality storage areas, muck removal, and artificial habitat creation
- Post Authorization Change Report (PACR) required to address total project cost and validate Phase 2 components; PACR scheduled for initiation in spring 2021
- Execute Phase 2 Project Partnership Agreement (PPA) following Congressional Authorization of PACR (2023/2024)

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:

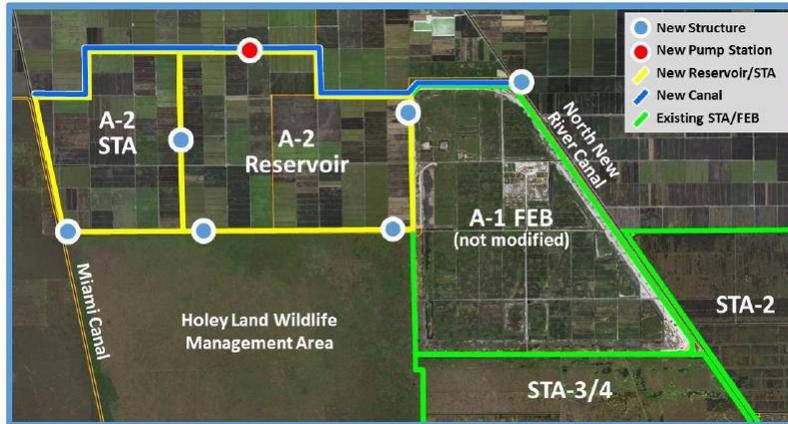
- PPA executed 27 July 2020
- CEPP South
 - SFWMD engaging design and construction of features
 - SAJ construction contract awarded in September 2020
- CEPP South Groundbreaking event conducted on 21 October 2020
- Initiated CEPP North Validation Report in October 2020



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Central Everglades Planning Project (CEPP)

Everglades Agricultural Area (EAA) Reservoir



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)
- SFWMD design efforts ongoing; construction efforts initiated 20 April 2020
- USACE design efforts ongoing; construction funding available; Project Partnership Agreement (PPA) execution and planned award construction contract in FY21
- EAA Reservoir reauthorized in WRDA 2020 as a modification of the Central Everglades Planning Project (CEPP)



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM OPERATIONS

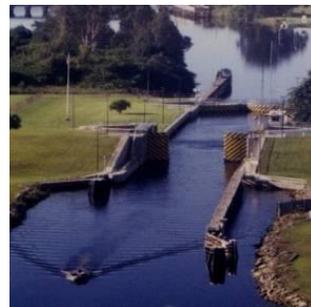


- ▶ Lake Okeechobee System Operating Manual (LOSOM)



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

Lake Okeechobee System Operating Manual (LOSOM)



GOAL: Develop a new Lake Okeechobee regulation schedule that better balances the project's authorized purposes and is mutually beneficial for all stakeholders

- Overall Budget = \$5.086M
- FY21 = \$1.35M
 - Conceptual Plan modeling and evaluation
 - Initial and final array modeling and evaluation
 - Recommended lake schedule selection and optimization
 - Public outreach and engagement
- FY22 = \$1.486M
 - Complete documentation
 - Public outreach and reviews
 - Agency technical reviews and IEPR
- Completion in October 2022



SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

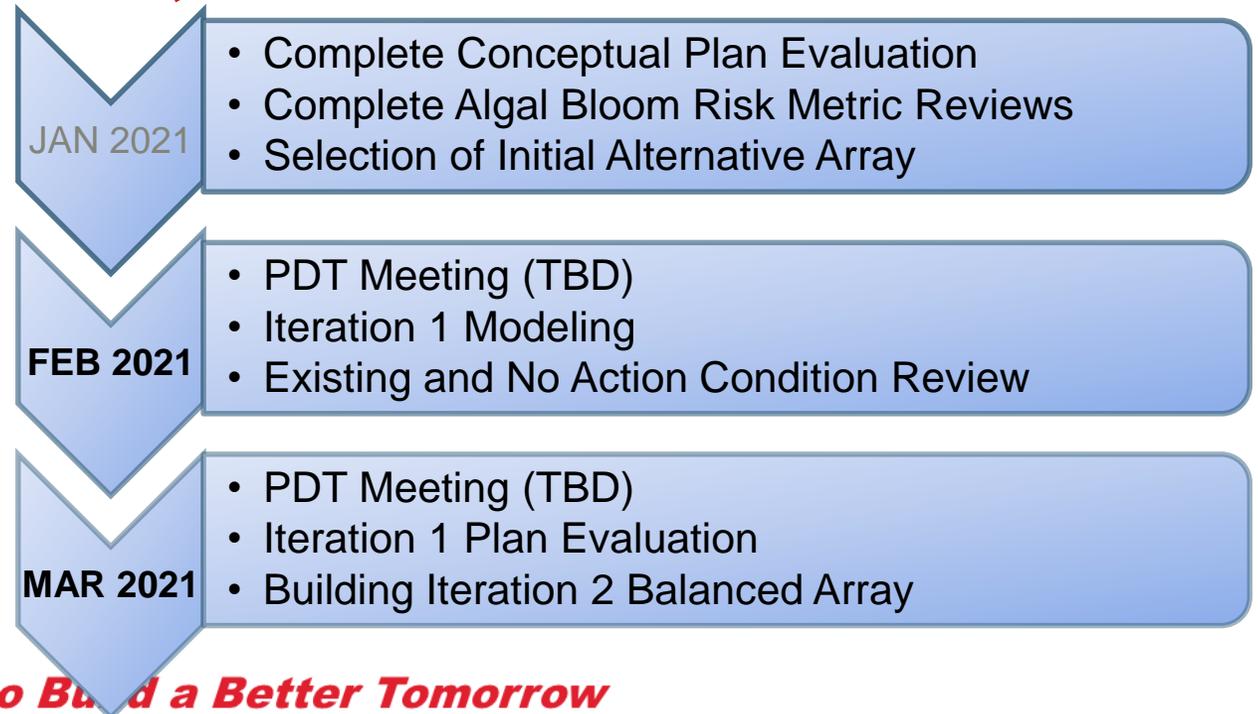
Lake Okeechobee System Operating Manual (LOSOM)



SCHEDULE



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



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