

# SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

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

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17 September 2020



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## Agenda

### Program Items

- ▶ 2020 Report to Congress
- ▶ CISRERP Contract Renewal

### Project Items: FY20 Execution Focus

- ▶ FY20 Budget / FY21 President's Budget
- ▶ Planning
  - Loxahatchee River Watershed Restoration Project (LRWRP)
  - C-43 West Basin Storage Reservoir
  - Lake Okeechobee Watershed Restoration Project (LOWRP)
  - 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)



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## 2020 Report to Congress



### Next Steps:

- Revised report to ASA/CW for review
- Draft Agency Letters
- Ongoing coordination and consultation with tribes
- Consult with SFER Task Force
- Release revised report to public
- Final report to Congress



# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## CISRERP Contract Renewal

### CISRERP 2015-2020

- Memorandum of Agreement (MOA)
  - Implementing Parties - Department of Interior (DOI), USACE and State of Florida
  - Executed in 2015 and goes through April 2021
- Cooperative Agreement (CA)
  - National Academy of Sciences (NAS) and USACE
  - Approved Budget = \$1,925,000
  - Executed in 2015 and goes through August 2020

### CISRERP 2020-2025 Path Forward

- DRAFT - Memorandum of Agreement (MOA)
  - Implementing Parties - Department of Interior (DOI), USACE and State of Florida
  - Update to cover time period of 2020 - 2024
- DRAFT - Cooperative Agreement (CA)
  - National Academy of Sciences (NAS) and USACE
  - Budget = \$1,691,000
  - Scope includes the completion of 2020, 2022 and 2024 report cycles

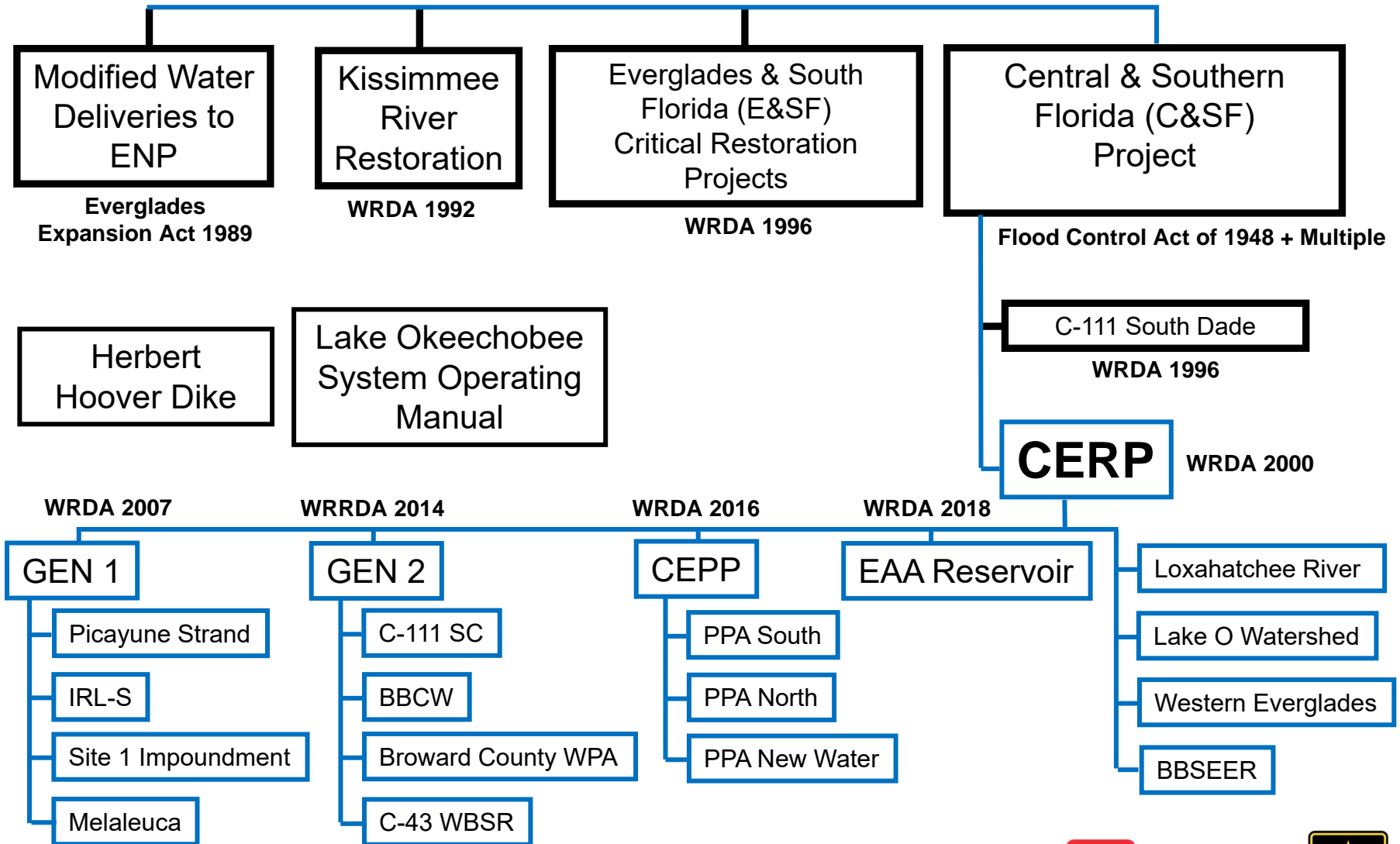


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# SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

## Program Structure



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

Foundation Projects



# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM FY20 & FY21 Budget

CONSTRUCTION		OPERATIONS & MAINTENANCE
\$200M	FY20 President's Budget	\$5.454M
\$35M	FY20 Work Plan	\$8.367M
\$235M	FY20 TOTAL	\$13.821M
\$250M	FY21 President's Budget	\$10.052M



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM PLANNING

- ▶ Loxahatchee River Watershed Restoration Project (LRWRP)
- ▶ C-43 West Basin Storage Reservoir
- ▶ Lake Okeechobee Watershed Restoration Project (LOWRP)
- ▶ Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER) Project



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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
- WRDA 2020 Consideration





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## 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
- WRDA 2020 consideration



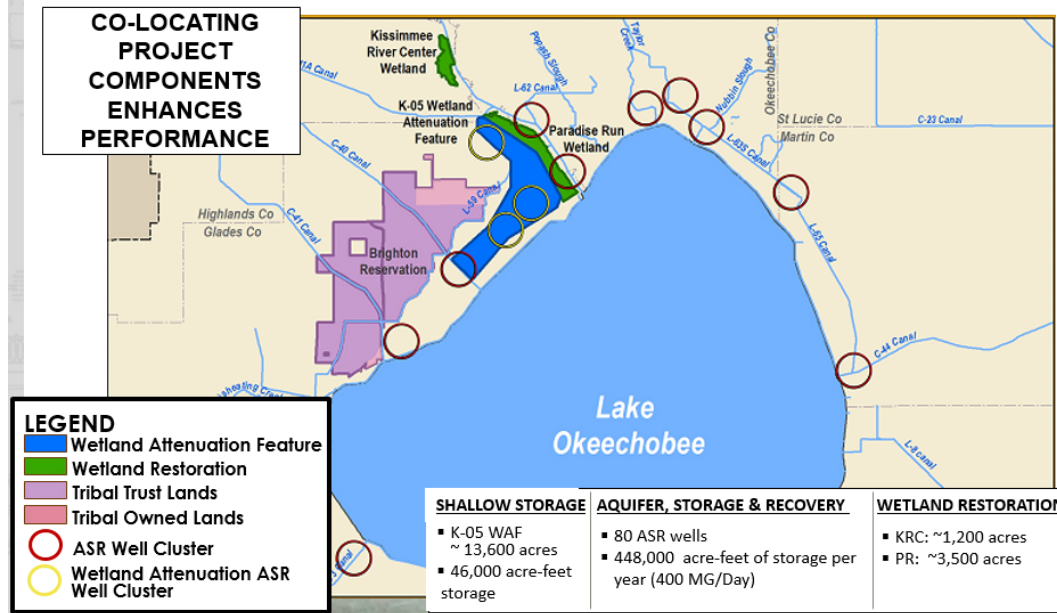
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## Lake Okeechobee Watershed Restoration Project

### 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.

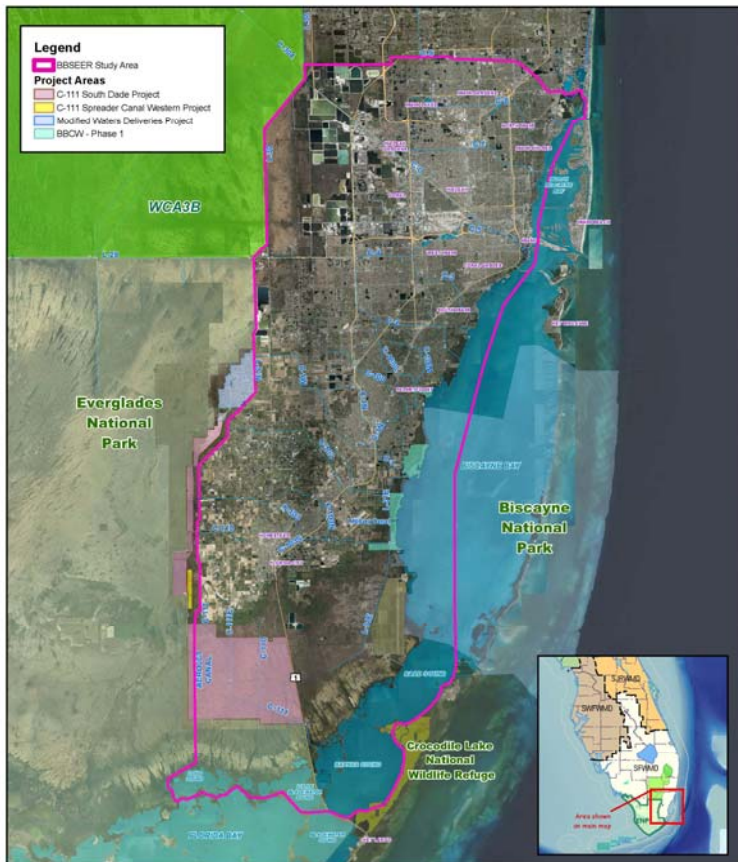
#### Status:

- Project Implementation Report (PIR) in final stages of development
- Final Public Review (PIR/EIS) – August 2020
- State & Agency Review (Chief’s Report) – September 2020
- Chief’s Report – November 2020
- WRDA 2020/2022 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
- PDT Meeting scheduled for 23 September



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# **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)
- ▶ Everglades Agricultural Area (EAA) Reservoir



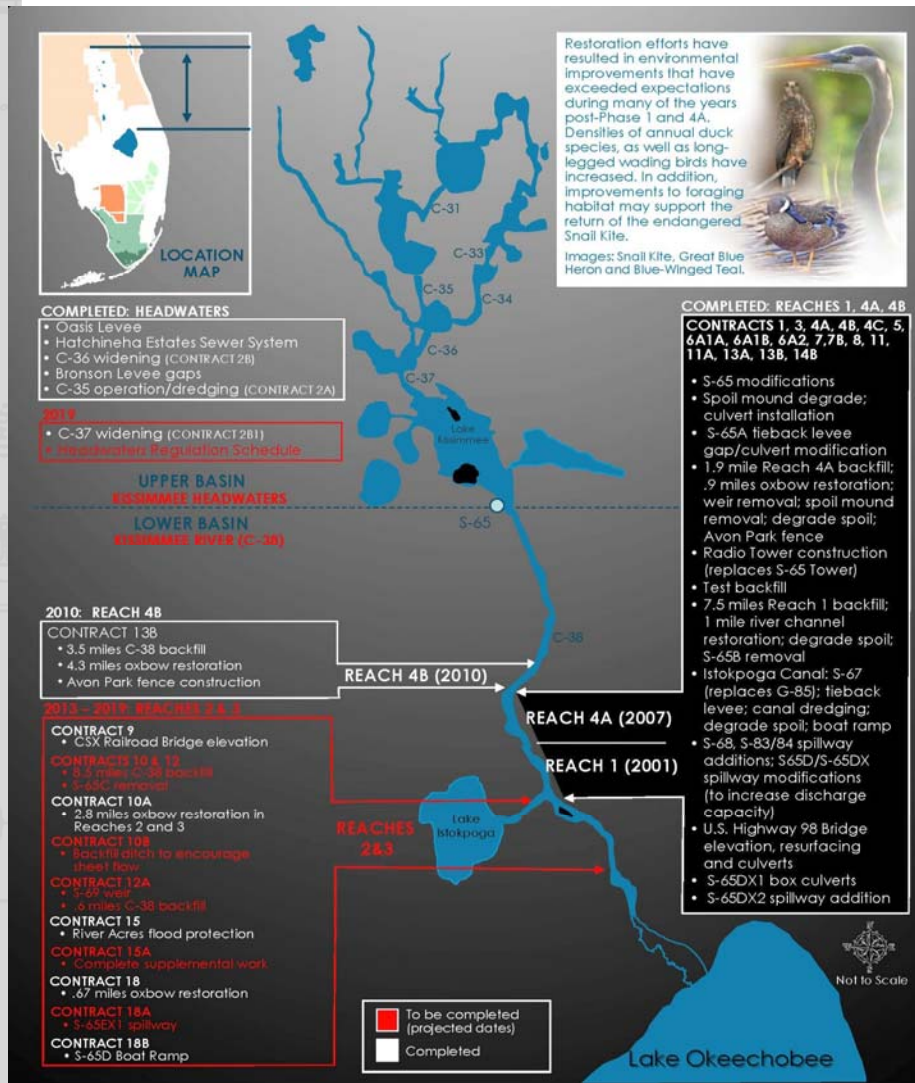
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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## 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

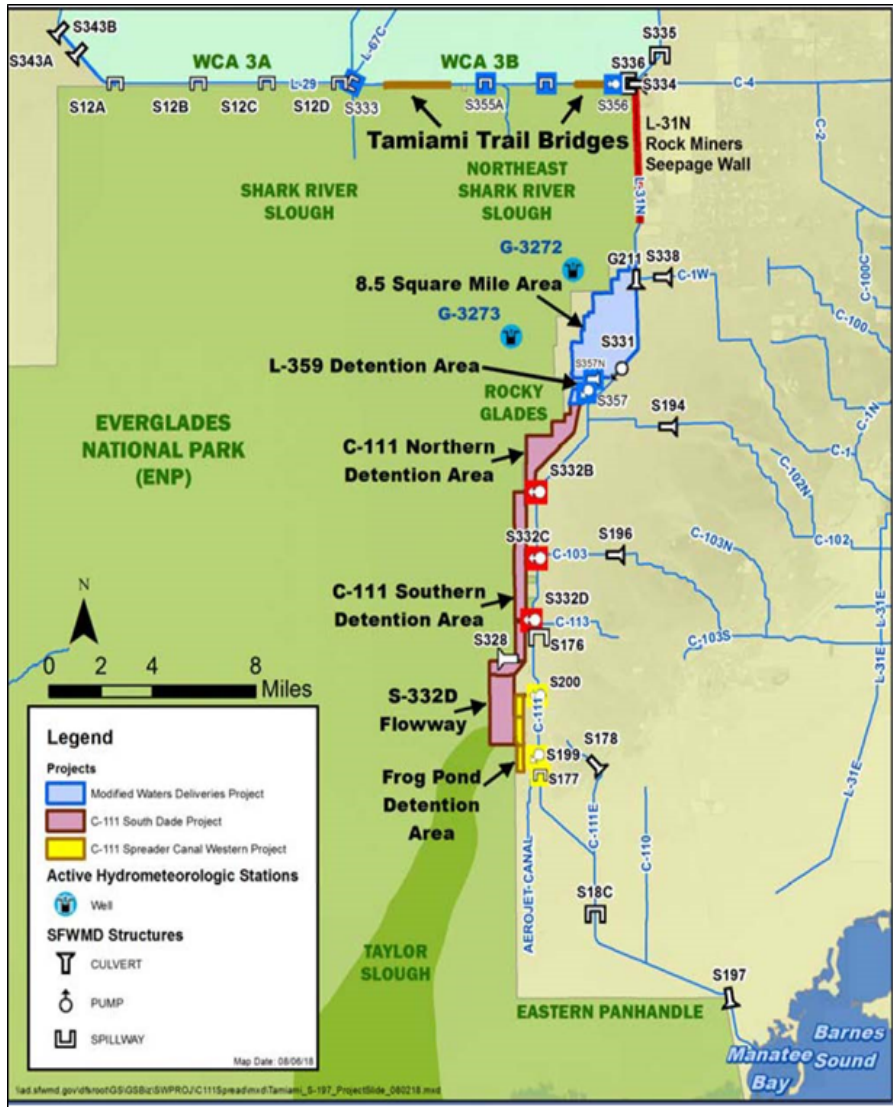


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## Canal 111 (C-111) South Dade



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
- WRDA 2020 Consideration

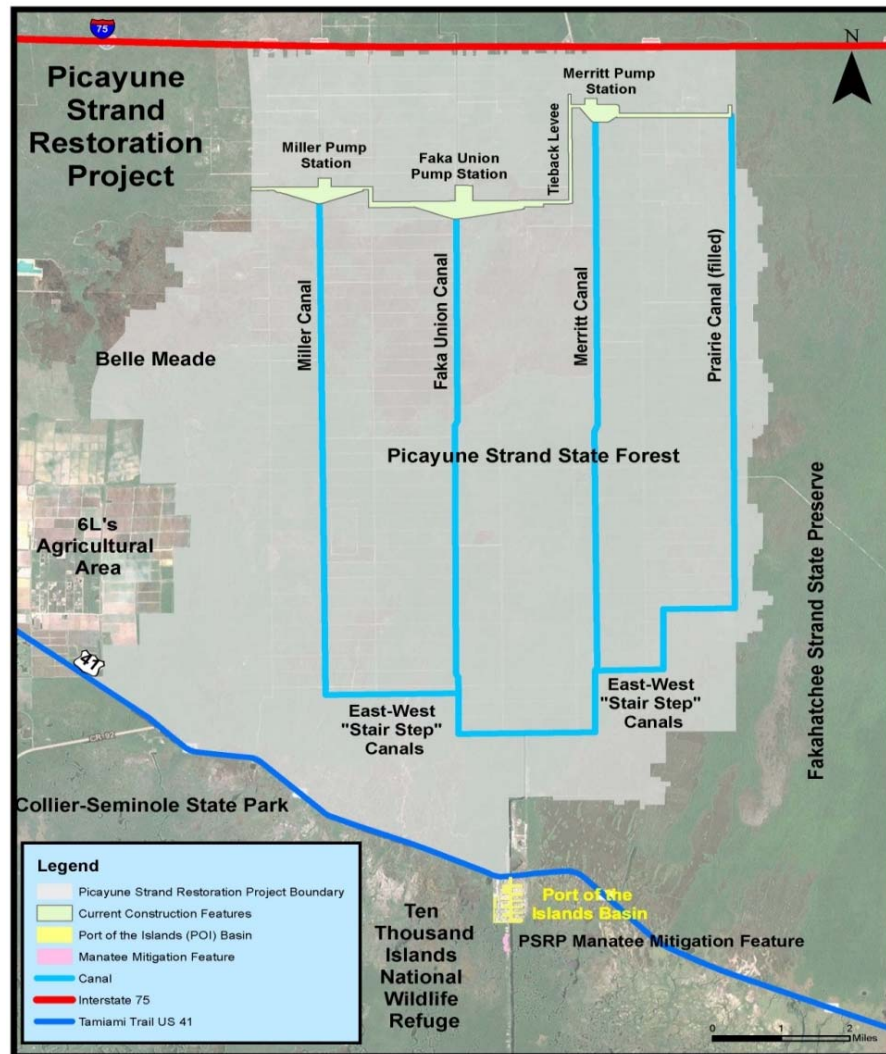


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## Picayune Strand Restoration Project (PSRP)



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:

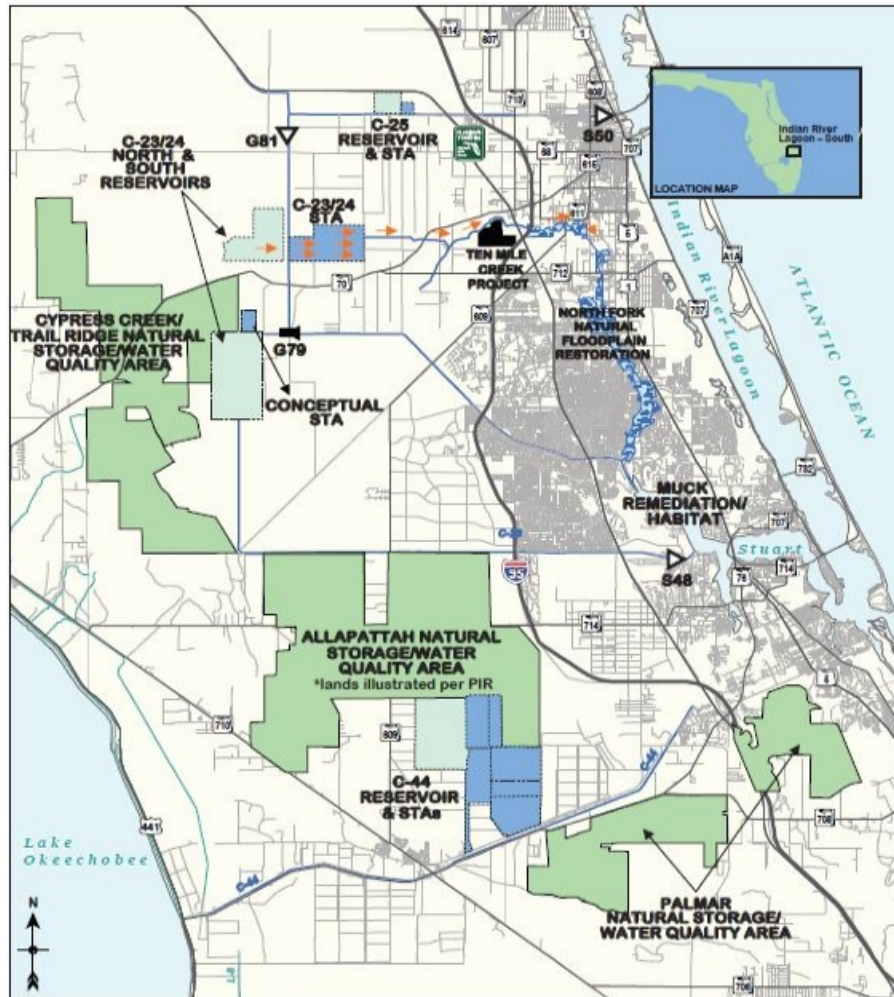
- Pump Stations complete and transferred to SFWMD for OMRR&R
- Road removal and canal plugging ongoing
- Southwest Protection Features construction contracts scheduled for September 2020 award





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## 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 man made wetlands
- 889 acres of restored oyster habitat
- 922 acres of submerged aquatic vegetation restored

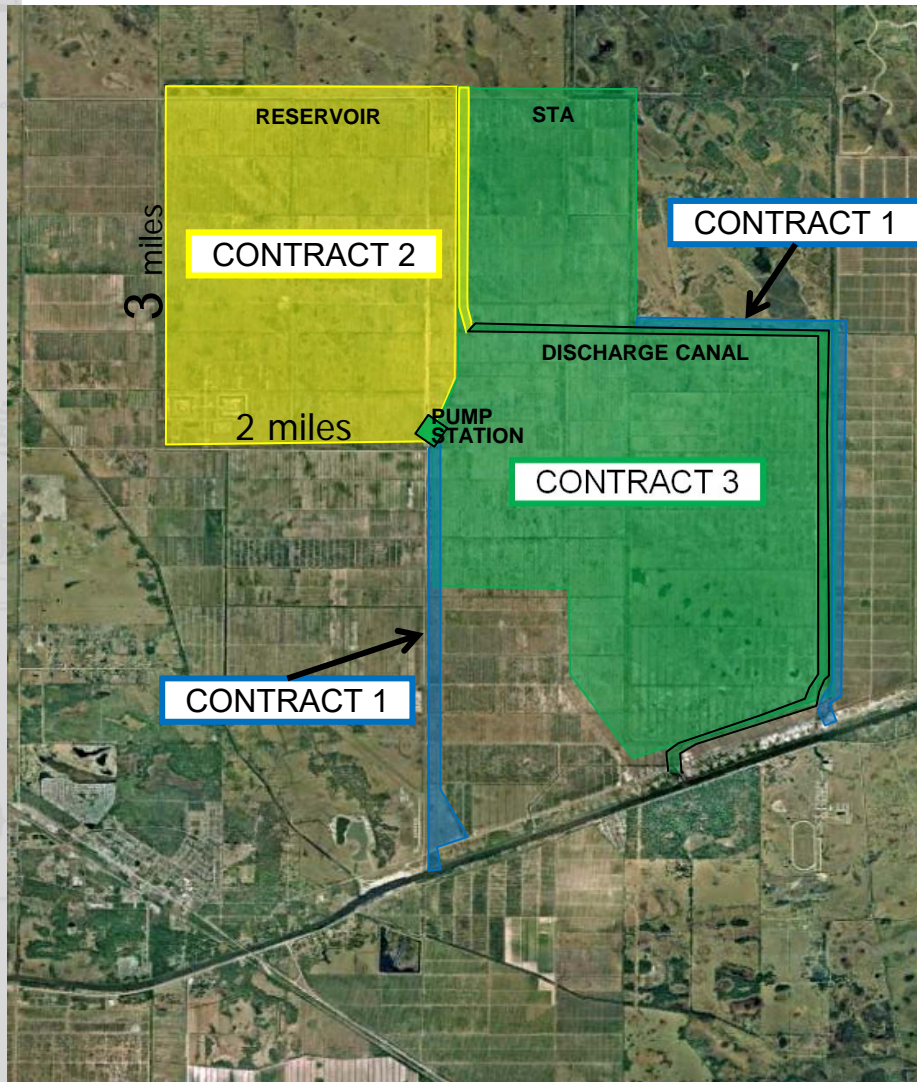


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## Indian River Lagoon – South: C-44 Reservoir / STA



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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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

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



Construction Completion = Summer 2021!

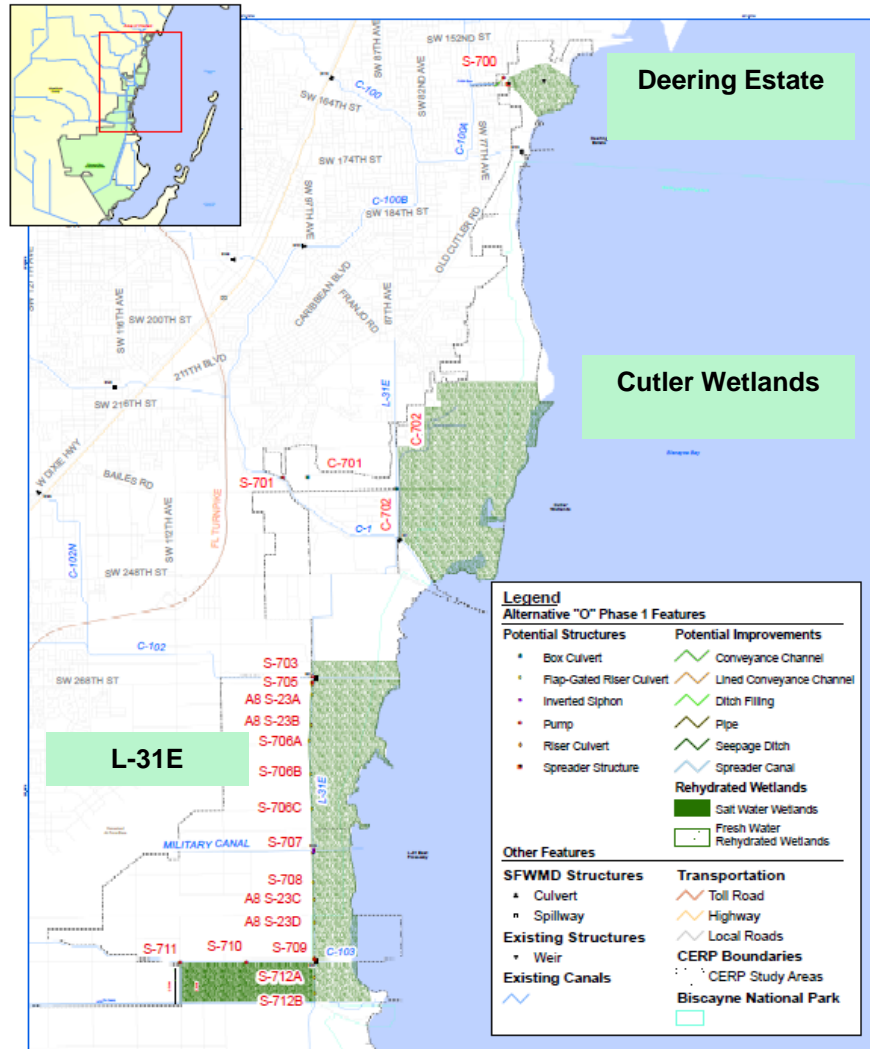


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## Biscayne Bay Coastal Wetlands (BBCW)



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

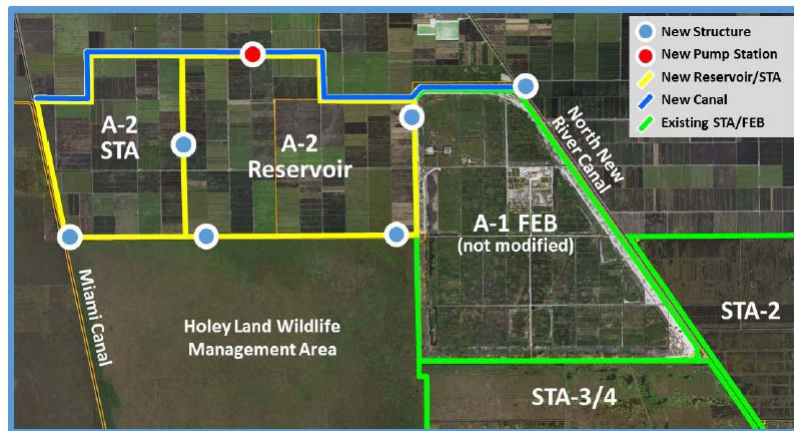






# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## 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; awaiting construction funding and approval to execute Project Partnership Agreement (PPA) and award construction contract



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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM OPERATIONS

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



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# 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!
- Record of Decision signed 28 August 2020



# 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.



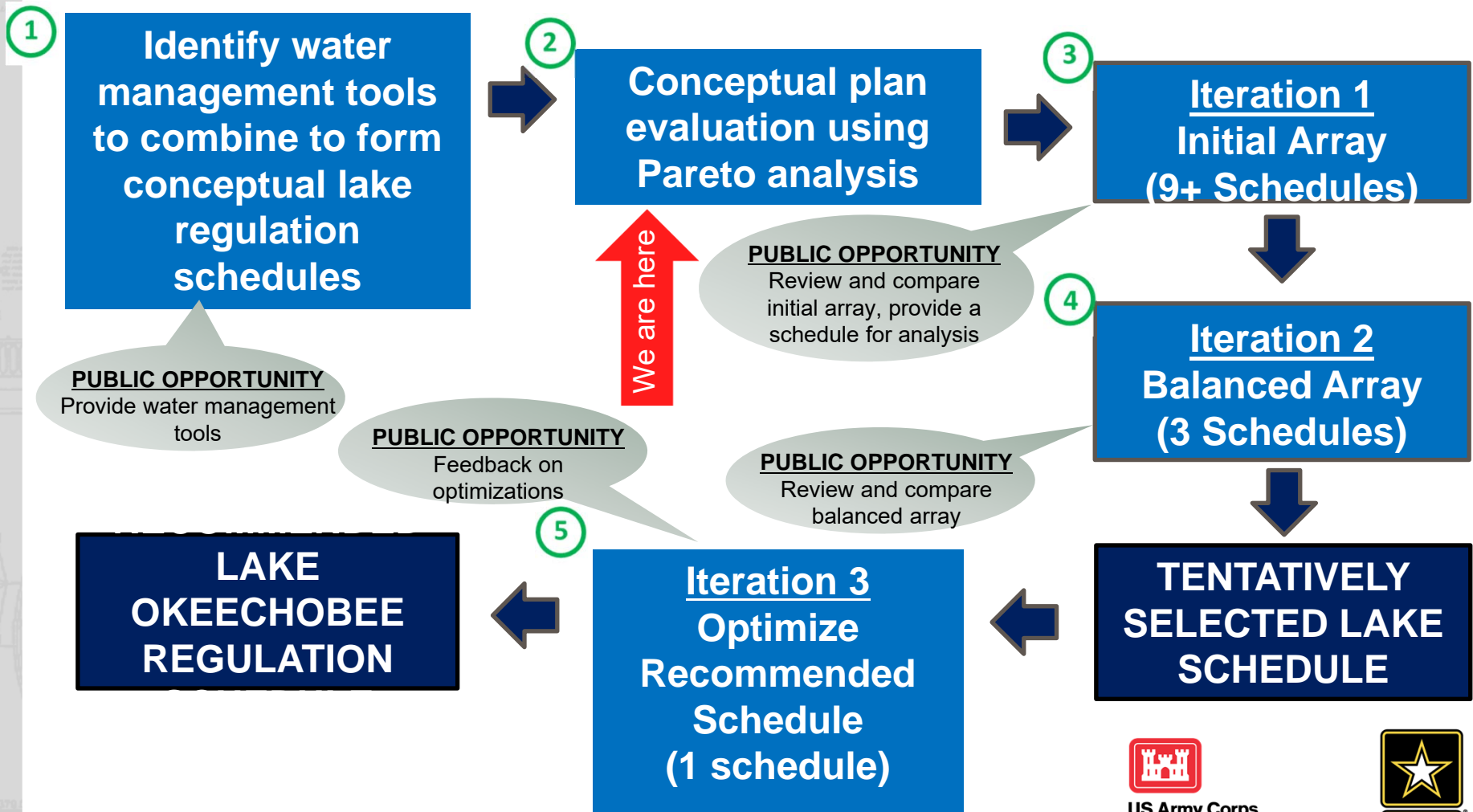
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# SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM

## Lake Okeechobee System Operating Manual (LOSOM)

### LOSOM PLAN FORMULATION PROCESS



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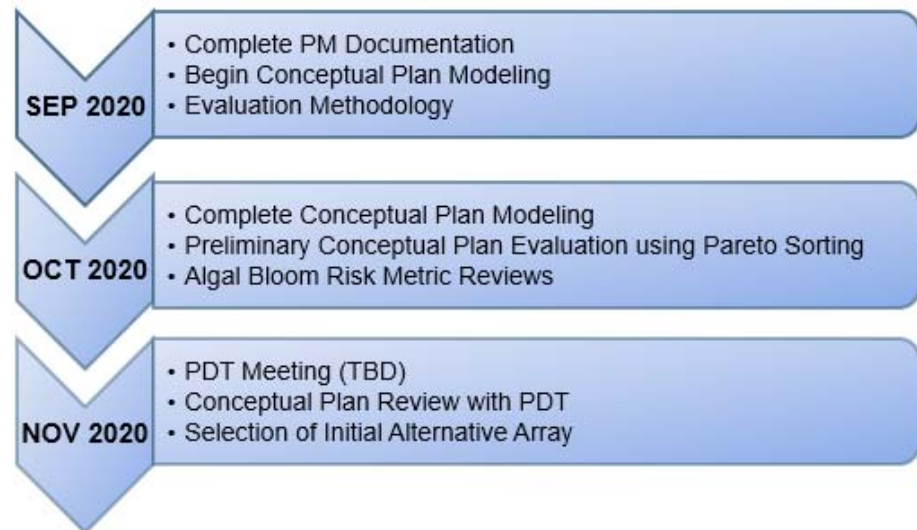
## Lake Okeechobee System Operating Manual (LOSOM)

### SCHEDULE



#### 90 DAY LOOK AHEAD

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



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