SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

Program & Project Update

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28 January 2021

Working Today to Build a Better Tomorrow
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)
• 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.

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
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

Modified Water Deliveries to ENP
- Everglades Expansion Act 1989

Kissimmee River Restoration
- WRDA 1992

Everglades & South Florida (E&SF) Critical Restoration Projects
- WRDA 1996

Central & Southern Florida (C&SF) Project
- Flood Control Act of 1948
  - C-111 South Dade
  - WRDA 1996

C&S F Section 216 FRM Infrastructure Resiliency Plan

CERP
- WRDA 2000

Herbert Hoover Dike

Lake Okeechobee System Operating Manual

GEN 1
- Picayune Strand
- IRL-S
- Site 1 Impoundment
- Melaleuca

GEN 2
- C-111 SC
- BBCW
- Broward County WPA
- C-43 WBSR

CEPP
- PPA South
- PPA North
- PPA New Water

EAA Reservoir
- WRDA 2020

Loxahatchee River

Foundation Projects

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

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Working Today to Build a Better Tomorrow
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
► 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
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!!!
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!!!
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) 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
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
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)
► 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
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
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!!!
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
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
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:

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<td>CNT-2 (USACE) – Reservoir</td>
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SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM
Indian River Lagoon – South: C-44 Reservoir / STA

Construction Completion = Summer 2021!
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)
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
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
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)
► 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

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90 DAY LOOK AHEAD

- Complete Conceptual Plan Evaluation
- Complete Algal Bloom Risk Metric Reviews
- Selection of Initial Alternative Array

JAN 2021
- PDT Meeting (TBD)
- Iteration 1 Modeling
- Existing and No Action Condition Review

FEB 2021
- PDT Meeting (TBD)
- Iteration 1 Plan Evaluation
- Building Iteration 2 Balanced Array

MAR 2021

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