# SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) COMPREHENSIVE EVERGLADES RESTORATION PLAN (CERP)

# 2020 REPORT TO CONGRESS

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US Army Corps of Engineers®

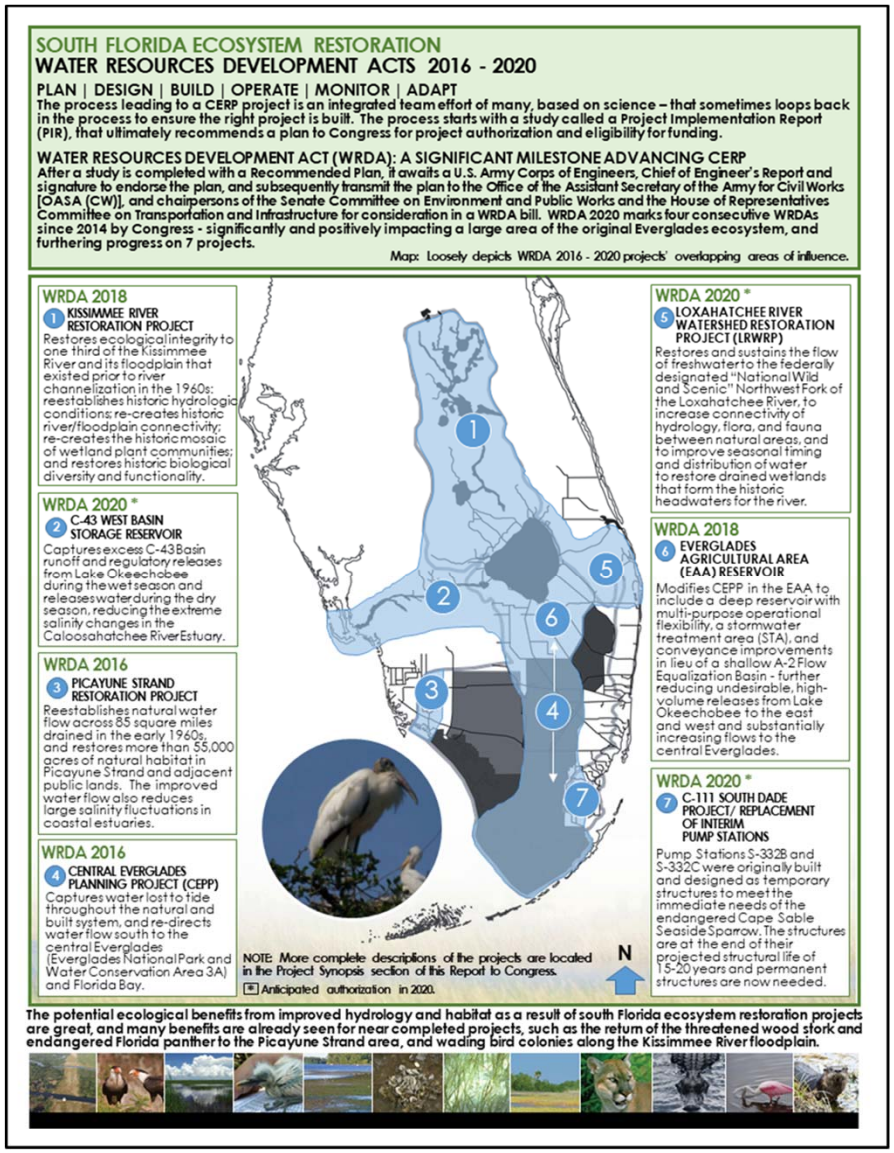
The South Florida ecosystem, known as America's Everglades, is both nationally significant and unique in the world. The Comprehensive Everglades Restoration Plan will restore, protect, and preserve a natural resource treasure – the South Florida ecosystem.

# BUILDING ON HISTORIC MOMENTUM

**With Support from Congress We Have Accomplished Big Things for America's Everglades and Our Economy:**

Federal, state, local, and tribal governments, the United States Congress, the Florida Legislature, stakeholder groups, and members of the public have taken concrete, collaborative steps over the past five years to move key restoration programs and plans forward.

This reporting period has been busy with new construction starts, project completions, accelerated planning efforts, and record-breaking new investments.



# SUCCESSFUL PARTNERSHIP

The U.S. Army Corps of Engineers (USACE) is the lead federal agency responsible for undertaking implementation of the CERP in partnership with the SFWMD (lead non-federal sponsor). The implementation of the CERP strongly depends on partnerships with the U.S. Department of Interior (USDOI), the State of Florida, and other local sponsors (U.S. Congress 2000).

Approximately $1.3 billion in funding, in combined contributions from the federal and state partners, has been provided in support of the CERP and prospective CERP projects over the past five fiscal years.

CERP cumulative expenditures through fiscal year 2019 total $3.23 billion.

The updated cost estimate for CERP is $23.158 billion.

## MOMENTUM AND THE MILESTONES

2015-2020

The array of efforts and coordination between federal, state and local partners and stakeholders to move Everglades restoration forward is immense – as is the range of expertise required across all phases of the project delivery process. Although "Plan – Design – Build – Operate – Monitor – Adapt" is a simple way to refer to a very integrated and complex process, these milestones do allow us to take a brief pause, whether informally in a status report or formally with a ceremony, to recognize those that have contributed to the current milestone and those who will contribute to the next. Records of these milestones are yet another way to tell a story of restoration coordination and dedication that is making the vision of a healthy Everglades a reality.

### NON-CERP MILESTONES

**C-111 SOUTH DADE (C-111 SD)**
- All construction contracts completed
- Post-Authorization Change Report to replace the existing temporary S-332B and S-332C pump stations with permanent pumps stations and concrete outlets completed
- Combined Operations Plan (COP) for C-111 SD and Modified Water Deliveries to Everglades National Park (MWD) recommended plan and water control plan update completed

**HERBERT HOOVER DIKE (HHD) MAJOR REHABILITATION PROJECT AND DAM SAFETY MODIFICATION STUDY**
- Replacement of 17 water control structures (culverts)
- Construction contracts for the remaining 11 culvert replacements awarded
- Construction contracts for the remaining 35.2 miles of cutoff wall installation awarded
- Initiation, scoping and plan formulation of Lake Okeechobee System Operations Manual (LOSOM), a new Lake schedule/revised water control plan

**KISSIMMEE RIVER RESTORATION PROJECT**
- Construction completed for:
  - S-65EX1 Structure
  - River Acres Canal
  - MacArthur Ditch Backfill
  - Reach 3 Backfill
  - Reach 3 North Backfill Repairs
- Construction of Reach 2 Backfill awarded
- Construction of S-69 Weir and Reach 3 Backfill Repairs awarded

**LAKESIDE RANCH STORMWATER TREATMENT AREA (STA)**
- Operation of Phase II, southern Stormwater Treatment Area (STA)
- Construction of Phase III, S-191A pump station, initiated

**MODIFIED WATER DELIVERIES TO EVERGLADES NATIONAL PARK (MWD)**
- All construction contracts completed
- Operational field testing of S-356 and G-3273 relaxation while incrementally raising the L-29 Canal stage initiated under Increment 1
- Operational Increment 1.1/1.2 implemented
- Operational Increment 2 implemented
- Combined Operations Plan (COP) for C-111 SD and MWD recommended plan and water control plan update completed

**RESTORATION STRATEGIES**
- Construction and the Operational, Testing, and Monitoring Phase (OTMP) of A-1 Flow Equalization Basin (FEB) completed
- Construction and OTMP of L-8 FEB completed
- Modification/construction of three primary conveyance features (S-5AS, L-8 divide structure, and S-375) completed

**TAMIAMI TRAIL NEXT STEPS PROJECT**
- Construction of 2.6-mile bridge completed

**TEN MILE CREEK WATER PRESERVE AREA**
- Rehabilitation of reservoir to allow a 4-foot fill
- Operations of water preserve area and STA

**WEST PALM BEACH CANAL STA-1 EAST/C-51 WEST**
- Culvert repairs completed

### CERP MILESTONES

**BISCAYNE BAY COASTAL WETLANDS, PHASE 1**
- Operation of L-31E Interim Pump for early benefits in coastal wetlands and Biscayne Bay
- Installation of all L-31E Flow-way culverts completed
- L-31E Contract 4 awarded for L-31E flow-way

**BROWARD COUNTY WATER PRESERVE AREA**
- Construction of Mitigation Area A Berm completed

**C-111 SPREADER CANAL WESTERN PROJECT**
- Installation and operation of additional pump capacity at S-199 and S-200 completed
- Connection of the C-222 Header Channel to the L-31W Canal (via the G-737 culvert) completed

**CALOOSAHATCHEE RIVER (C 43) WESTERN BASIN STORAGE RESERVOIR PROJECT**
- Award for S-470 Intake Pump Station Contract
- Award for final contract for Embankment and Civil Works
- Construction of the S-476 Irrigation Pumping Station completed

**CERP EVERGLADES AGRICULTURAL AREA PROJECT**
- Design and early construction of the A2 STA initiated
- Design of the EAA A-2 Reservoir

**CENTRAL EVERGLADES PLANNING PROJECT**
- Construction of S-333N spillway (1,150 cfs ) completed
- Removal of Old Tamiami Trail Road and S-346 initiated
- Construction of Contract 1 (S-631, S-633 water control structures, L-67A Spoil Removal, and L-67C Levee Gap) initiated

**DECOMPARTMENTALIZATION PHYSICAL MODEL (DPM)**
- Years 3 and 4 of Phase I Testing during dry seasons (flow testing) completed
- Approval for Phase II year round testing
- Years 5, 6, and 7 of Phase II testing completed

**INDIAN RIVER LAGOON SOUTH, PHASE 1**
- Construction of C-44 STA discharge spillway completed
- C-44 STA initial fill initiated
- Construction of C-44 Reservoir Pump Station completed
- Design for C-23/24 North Reservoir, South Reservoir, and STA

**PICAYUNE STRAND RESTORATION PROJECT**
- Construction of Faka Union Pump Station completed
- Removal of 100 miles of roadways completed
- Construction of Miller Pump Station completed
- Removal of 65 miles of road and 26 miles of logging trams between Merritt and Faka Union Canals completed
- Construction of Manatee Mitigation Feature completed
- Construction of East-west canal plugging

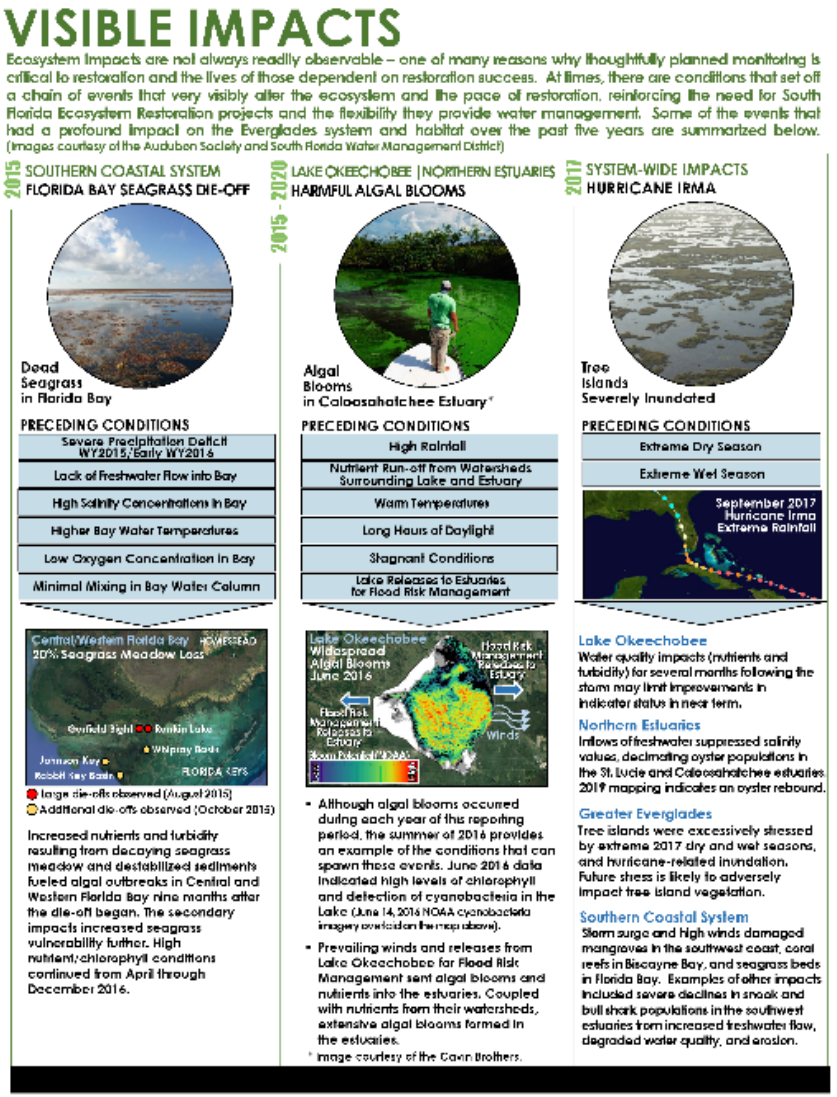
Images: Indian River Lagoon, South, Phase 1 Ribbon Cutting Event (activating the pumps at the C-44 Storm Water Treatment Area)

# EVENTS OF ECOLOGICAL SIGNIFICANCE

Over the past five years, several discrete events profoundly impacted the Everglades system. These include the seagrass die-off in Florida Bay, harmful algal blooms in the St. Lucie River and Estuary, and Hurricane Irma's impact to the whole system.

These are challenges that a healthy and restored ecosystem will be better able to weather in the future and they underscore the need for continued support for current and future CERP projects.

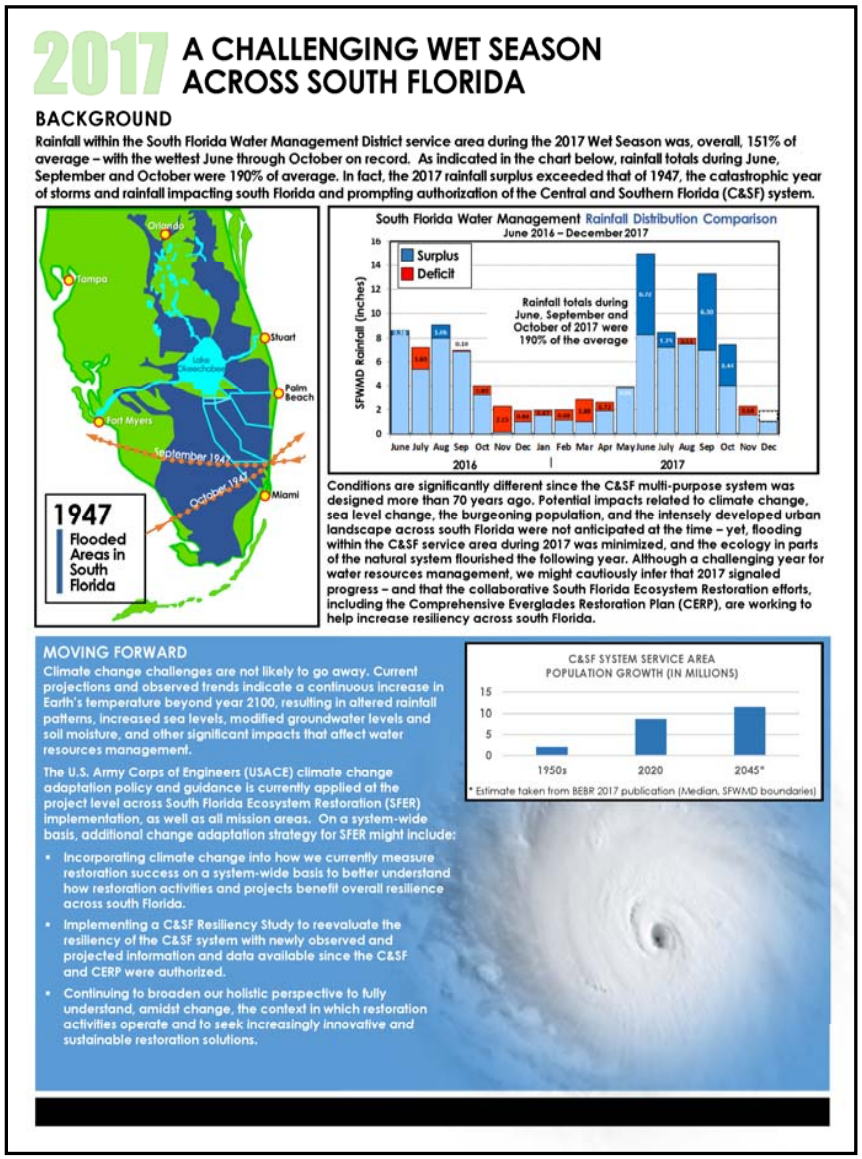
In addition, investments in the South Florida Ecosystem Restoration program provide direct and improved flexibility in the operations of the Central and Southern Florida (C&SF) system.



# EVENTS OF ECOLOGICAL SIGNIFICANCE

Water managers and scientists at USACE, working in concert with those from partner agencies and tribes, continue to assimilate the latest scientific data from across the South Florida Ecosystem to inform deliberate and transparent decisions.

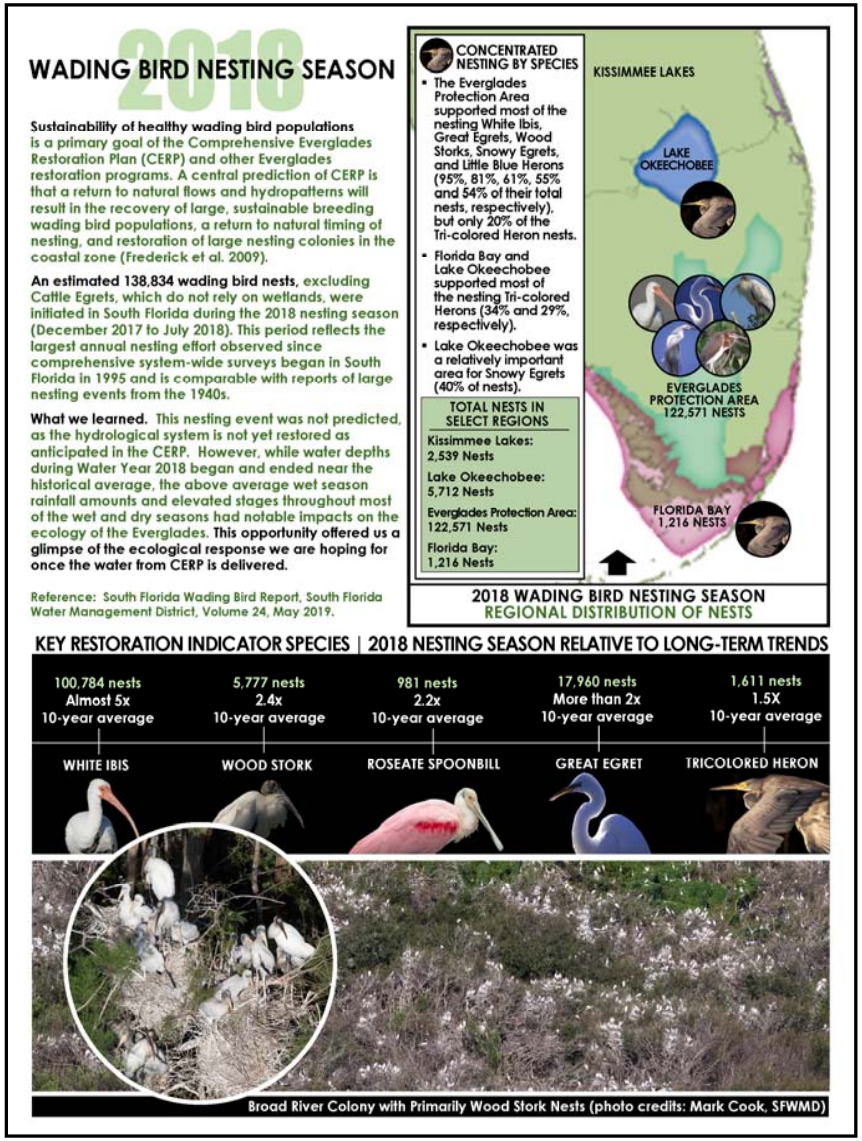
Interagency teams meet and report on-the-ground ecological conditions of Lake Okeechobee, considered the heart of the Central and Southern Florida system, on a weekly and monthly basis through calls and online reporting



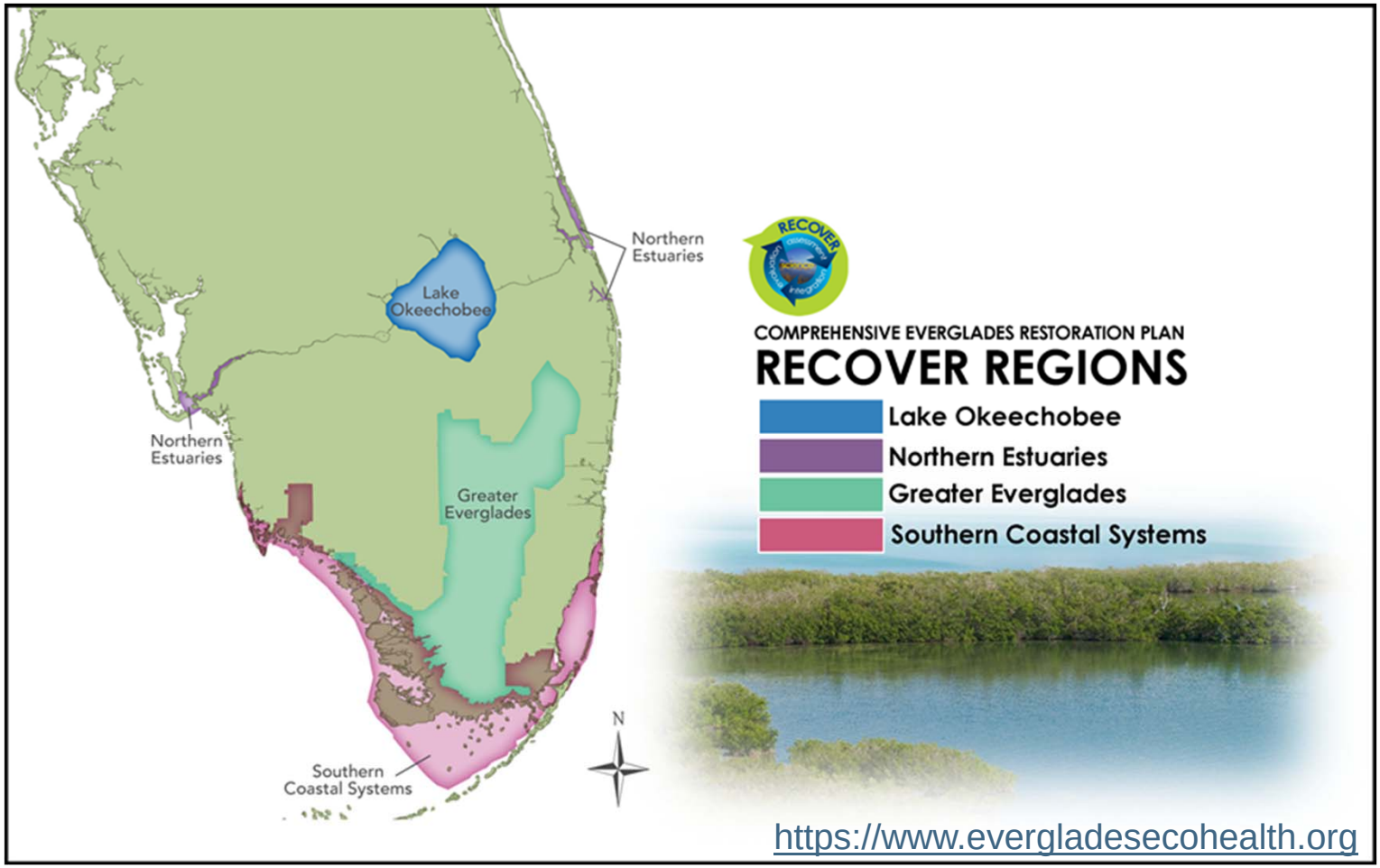
# EVENTS OF ECOLOGICAL SIGNIFICANCE

In water year 2018, the above average wet season rainfall amounts and elevated stages throughout most of the wet and dry seasons had notable impacts on the ecology of the Everglades.

This opportunity offered us a glimpse of the ecological response we are hoping for once the water from the CERP is delivered.



# RESTORATION SCIENCE




https://www.evergladesecohealth.org

# PARTNERS IN RESTORATION

- The South Florida Ecosystem Restoration Task Force
- Coordination and Consultation with Tribal Governments
- Public Participation and Stakeholder Engagement
- CERP Project Delivery Team (PDT) Meetings
- Task Force Meetings and Stakeholder Workshops
- SFWMD Governing Board and Water Resources Accountability and Collaboration

# TRIBAL INTERESTS – NATIVE PEOPLE OF THE SOUTH FLORIDA ECOSYSTEM

The following federally recognized Tribes have been consulted during the planning and preparation of the Project Implementation Reports and the subsequent design and construction efforts associated with the CERP implementation:

- Miccosukee Tribe of Indians of Florida
- The Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- Thlopthlocco Tribal Town

The USACE is honored to present the positions of the tribes in this report, they are included verbatim as provided by the tribal staff.

MICCOSUKEE
TRIBE OF INDIANS OF FLORIDA

SEMINOLE TRIBE OF FLORIDA
Tribal Council
IN GOD WE TRUST

# PARTNERS IN RESTORATION, CONTINUED

- Regional Environmental Monitoring and Assessment Program (US EPA)
- C-43 West Basin Storage Reservoir Water Quality Feasibility Study (State of Florida)
- Blue-Green Algae Task Force and Innovative Technology (State of Florida)
- Basin Management Action Plans (State of Florida)

# WITH CONTINUED SUPPORT FROM CONGRESS, WE WILL ACCOMPLISH MORE

The next five years provide an opportunity to build upon the restoration program's current momentum and substantial recent progress:

- The success of CERP will stand on the shoulders of completed Foundation Projects that have bridged the Tamiami Trail and will continue to send more, clean, freshwater to the Greater Everglades and Everglades National Park.

- Great strides toward "getting the water right" will be made during the next reporting period: four Foundation Projects will have been completed, six CERP projects will have been constructed, and seven more CERP projects will be simultaneously under design and construction.

- Planning will also be underway for the next group of CERP projects including the Biscayne Bay Southeastern Everglades Ecosystem Restoration (BBSEER) study and the Southern Everglades study.


**Images:** Greater Everglades RECOVER Region; Wading Bird (Indicator)

# FINANCIAL PROGRAM

## Expenditures through Fiscal Year 2019:

| | USACE | SFWMD[2] | TOTAL |
|---|---|---|---|
| **Projects**[3] | $ 1,062,565,973 | $1,427,253,821 | $ 2,489,819,794 |
| Adaptive Assessment & Monitoring | $ 78,320,014 | $ 48,425,360 | $ 126,745,374 |
| Program Coordination | $ 268,375,074 | $ 191,121,363 | $ 459,496,437 |
| Estimated Work-in-Kind, not yet submitted[4] | n/a | $ 157,802,429 | $ 157,802,429 |
| **Total** | $ 1,409,261,060 | $ 1,824,602,974 | $ 3,233,864,034 |
| **Cost Sharing Percentage** | **44%** | **56%** | **100%** |

## Cost Estimate Update:

| | OCT 14 PRICE LEVEL | OCT 19 PRICE LEVEL |
|---|---|---|
| **Projects** | $15,514 | 22,234 |
| **AA&M** | $157 | $162 |
| **Program Coordination** | $737 | $762 |
| **TOTAL** | $16,408 | $23,158 |

# SCHEDULE & NEXT STEPS

- ❑ Coordination and Consultation with Tribes - ongoing
- ❑ Consultation with SFER Task Force - today
- ❑ Public Engagement – starts today for 30 days
- ❑ Agency Letters
  - ❑ Environmental Protection Agency - complete
  - ❑ Department of Interior – complete
  - ❑ Department of the Army – in progress
  - ❑ State of Florida – in progress
- ❑ Final report to congress in December 2020

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