

SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER)

2021 UPDATE INTEGRATED DELIVERY SCHEDULE WORKING DRAFT

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US Army Corps
of Engineers®





TODAY'S WORKING DRAFT IDS BRIEF



- Schedule
- Overview - where we've been, where we're going
- Public Engagement
- Progress and Momentum in 2021
- IDS Purpose, Investments, Project Locator
- Top Line
- System Operations
- Tracking Restoration Success with RECOVER
- Status of Yellow Book Components





SCHEDULE



INTEGRATED DELIVERY SCHEDULE 2021 UPDATE WORKING DRAFT
SOUTH FLORIDA ECOSYSTEM RESTORATION, CANAL, AND JOURNAN FLOOD CONTROLMENT, ENVIRONMENTAL IMPROVEMENTS, AND FISH AND WILDLIFE RESTORATION

The Comprehensive Ecosystem Restoration Plan (CERP) is the largest CERP initiative and is designed to improve the health of the South Florida ecosystem. The Integrated Delivery Schedule (IDS) is a forward-looking project of upcoming projects, goals, and completion dates. The IDS is a key tool for project management and coordination. It provides a clear view of the project schedule and allows for the identification of potential risks and opportunities. The IDS is a living document that is updated as needed to reflect changes in project status, priorities, and resources. The IDS is a key tool for project management and coordination. It provides a clear view of the project schedule and allows for the identification of potential risks and opportunities. The IDS is a living document that is updated as needed to reflect changes in project status, priorities, and resources.

PROJECT	START DATE	END DATE	STATUS	PHASE	REGION
101	2021	2021	Active	Construction	South Florida
68	2021	2021	Active	Construction	South Florida
100	2021	2021	Active	Construction	South Florida
102	2021	2021	Active	Construction	South Florida
103	2021	2021	Active	Construction	South Florida
104	2021	2021	Active	Construction	South Florida
105	2021	2021	Active	Construction	South Florida
106	2021	2021	Active	Construction	South Florida
107	2021	2021	Active	Construction	South Florida
108	2021	2021	Active	Construction	South Florida
109	2021	2021	Active	Construction	South Florida
110	2021	2021	Active	Construction	South Florida
111	2021	2021	Active	Construction	South Florida
112	2021	2021	Active	Construction	South Florida
113	2021	2021	Active	Construction	South Florida
114	2021	2021	Active	Construction	South Florida
115	2021	2021	Active	Construction	South Florida
116	2021	2021	Active	Construction	South Florida
117	2021	2021	Active	Construction	South Florida
118	2021	2021	Active	Construction	South Florida
119	2021	2021	Active	Construction	South Florida
120	2021	2021	Active	Construction	South Florida

SOUTH FLORIDA ECOSYSTEM RESTORATION AND GETTING THE WATER RIGHT – 2021 WORKING DRAFT Page 2

THE RESTORATION FRAMEWORK
OPERATIONS IN SYNC WITH PROJECT DELIVERY

TRACKING RESTORATION SUCCESS
The success of these goals will be measured in the authorization of the CERP and will be further developed into the Programmatic Regulations and defined on "a means by which the restoration success of the Plan may be evaluated throughout the implementation process."

COMPONENTS AND PROJECTS
The CERP identifies 48 components that can contribute significantly to "getting the water right" and restoring the health of the ecosystem. Through a rigorous planning process, the components identified in the CERP "redline book" are contained into 104 implementation projects that became part of the Integrated Delivery Schedule (IDS).

SOM VOLUMES BY REGION
Southern Operating Manuals: The Critical Last Step in Getting the Water Right and Achieving Maximum System-wide Benefits. Operating Manuals are the set of documents that describe how to operate components of the CERP Project and CERP projects to ensure the goals and purposes of the project are achieved. Operating Manuals for the CERP consist of a System Operating Manual (SOM) and Project Operating Manuals (POMs). Draft Project Operating Manuals (POMs) are actively developed during the planning phase of project delivery.

EA CONSTRUCTION RELEVANT SCHEDULES FOR SOM VOLUME WATER MANAGEMENT OPERATING OPERATIONS (POM), PFA, AND RCL

SOM VOLUME 1: WESTERN FLORIDA
1. Lake Okechobee Agricultural Drainage Project (LADP) (PFA)
2. Lake Okechobee Agricultural Drainage Project (LADP) (PFA)
3. Development of Operational Station Plan (PFA)

SOM VOLUME 2: LAKE OKECHOBEE
4. Lake Okechobee Agricultural Drainage Project (LADP) (PFA)
5. Lake Okechobee Agricultural Drainage Project (LADP) (PFA)
6. Lake Okechobee Agricultural Drainage Project (LADP) (PFA)

SOM VOLUME 3: EAST FLORIDA CANALS
7. Canal System Modernization (CSM) (PFA)
8. Canal System Modernization (CSM) (PFA)
9. Canal System Modernization (CSM) (PFA)

SOM VOLUME 4: SOUTH FLORIDA
10. South Florida Water Management Project (SFWMP) (PFA)
11. South Florida Water Management Project (SFWMP) (PFA)
12. South Florida Water Management Project (SFWMP) (PFA)

SOM VOLUME 5: WESTERN FLORIDA
13. Western Florida Water Management Project (WFMP) (PFA)
14. Western Florida Water Management Project (WFMP) (PFA)
15. Western Florida Water Management Project (WFMP) (PFA)

SOM VOLUME 6: EAST FLORIDA CANALS
16. Canal System Modernization (CSM) (PFA)
17. Canal System Modernization (CSM) (PFA)
18. Canal System Modernization (CSM) (PFA)

SOM VOLUME 7: SOUTH FLORIDA
19. South Florida Water Management Project (SFWMP) (PFA)
20. South Florida Water Management Project (SFWMP) (PFA)
21. South Florida Water Management Project (SFWMP) (PFA)

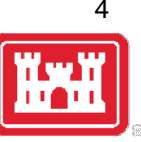
MAP: TABLE LEGEND
Approximate Location for each Component
RECOVER REGIONS (RR)
Recover Regions (RR)
Southern Canals (SC)
Southern Everglades (SE)
Southern Canal Systems (SC)
CERP Project
Projects with Phases
RECOVER Regions



- ✓ **August 5, 2021:** Integrated Delivery Schedule 101 and Stakeholder Listening Session
- ✓ **August 19, 2021:** Integrated Delivery Schedule 101, 68 CERP Components Overview and Listening Session with Stakeholders
- ✓ **September 2021:** Working Draft 2021 IDS Update
- ☐ **October 2021:** Release of Final 2021 IDS Update



INTEGRATED DELIVERY SCHEDULE (IDS) WHERE WE'VE BEEN, WHERE WE'RE GOING



What is new since 2020 IDS?

- Federal FY21 budget, \$250M
- Non-Federal FY21 budget, \$258M
- President's Budget for FY22, \$350M
- State of Florida's Budget for FY22, \$329M
- Annual updates to project-level scope, schedule and budget
- Authorization of projects in WRDA 2020

Key Take-Aways

- Investments through Fiscal Year 2020 (September 30, 2020)
 - SFER ~\$6 billion
 - Restoration Strategies and Everglades Construction Project ~\$2 billion
 - Herbert Hoover Dike Rehabilitation ~\$1.6 billion
- Estimate for Total SFER Construction is ~\$8.1 billion from 2020 to 2030

Public Engagement

- August 5, 2021: IDS 101 and Stakeholder Listening Session
- August 19, 2021: IDS 101, 68 CERP Components Overview and Listening Session with Stakeholders
- Available at evergladesrestoration.gov and www.saj.usace.army.mil/Missions/Environmental/Ecosystem-Restoration/Integrated-Delivery-Schedule/

Strategic Initiatives

- Ongoing work-in-kind credit adjustments
- CERP Cost Share
- Execution of Project Partnership Agreements
- Anticipated Authorization of Projects in the 2022 Water Resources Development Act



RECAP OF LISTENING SESSIONS



- IDS 101 and Listening session– **5 August 2021**
- 68 Components Overview and Listening session– **19 August 2021**
 - Both were well attended –over 100 attendees including a variety of stakeholders and public participants
 - Appreciation for the webinar series, the public engagement, and depth of information represented in the IDS from participants
 - Q & A well received, several questions focused on sequencing and priority, sea level rise and climate change and cost share





2021 IDS UPDATE



Providing Benefits, Complete and Moving Off the IDS Front Page

- Modified Water Deliveries to Everglades National Park
- Picayune Strand Restoration
 - Faka Union Pump Station
 - Miller Pump Station
- Broward County Water Preserve Areas
 - Mitigation Area A Berm

Moving into Operations, Incremental Benefits

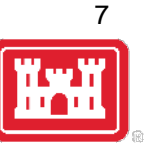
- Kissimmee River Restoration – operational transition plan and evaluation monitoring
- Indian River Lagoon South
 - C-44 Reservoir and STA
- Central Everglades Planning Project
 - Removal of Old Tamiami Trail

Under Construction in 2021-2022

- Herbert Hoover Dike Rehab
- Restoration Strategies
- Tamiami Trail Next Steps Phase 2
- Picayune Strand
 - Flood Protection Features – Conveyance
 - Flood Protection Features – Levee
 - Road Removal
- Caloosahatchee River (C-43) West Basin Storage Pump Station and Reservoir
- Biscayne Bay Coastal Wetlands Phase 1
 - L-31 East Flow-way S-705 and S-709 Pump Stations
- Central Everglades Planning Project
 - Structures S-631, S-632 and gap in L-67C Levee S Spoil Removal



2021 IDS UPDATE, CONTINUED



Projects with actual and anticipated construction starts in FY21 and FY22

- Picayune Strand Restoration Project
 - Canal plugging
- Indian River Lagoon South
 - C-23/24 Stormwater Treatment Area
 - C-23/C-44 Interconnect
- Biscayne Bay Coastal Wetlands, Phase 1
 - L-31 East Flow-way S-703 PS, S-710 PS, S-711 PS, and C-711W Seepage Canal
 - Cutler Wetlands
- Central Everglades Planning Project
 - EAA Reservoir - Seepage Canal (7.2 miles) and Inflow/Outflow Canal
 - EAA Reservoir - Foundation and Cutoff Wall



PURPOSE, INVESTMENTS, PROJECT LOCATOR AND LEGEND



INTEGRATED DELIVERY SCHEDULE 2021 UPDATE **WORKING DRAFT** SOUTH FLORIDA ECOSYSTEM RESTORATION | CENTRAL AND SOUTHERN FLORIDA COMPREHENSIVE EVERGLADES RESTORATION PLAN

The Comprehensive Everglades Restoration Plan (CERP) is the largest aquatic ecosystem restoration effort in the nation, spanning over 18,000 square miles, and is designed to improve the health of more than 2.4 million acres. The Integrated Delivery Schedule (IDS) is a forward-looking snapshot of upcoming planning, design, and construction schedules and programmatic costs at a "top" line level for the South Florida Ecosystem Restoration (SFER) Program – including CERP, Modified Water Deliveries to Everglades National Park, the Critical Projects Program, Kissimmee River Restoration, and non-CERP Central and Southern Florida (C&SF) projects.

The IDS reflects the sequencing strategy for planning, design, and construction and does not include costs for work completed in other fiscal years or land acquisition. The IDS does not require an agency action and is not a decision document. It is a tool that provides information to decision-makers – a living document that is updated as needed to reflect progress and/or program changes. The IDS synchronizes program and project priorities with the State of Florida and achieves the CERP restoration objectives at the earliest practicable time, consistent with funding constraints and the interdependencies between project components.

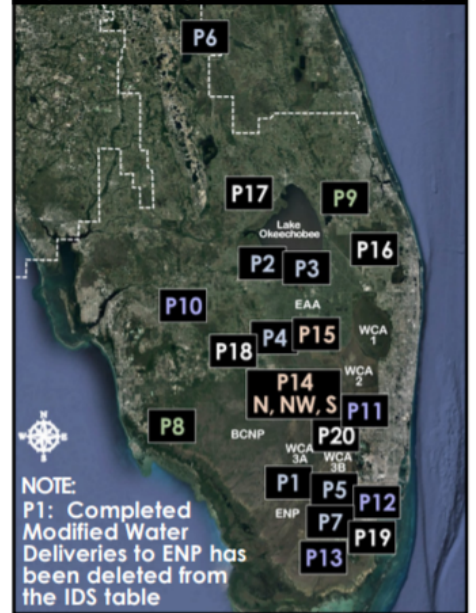
Although non-CERP and Foundation projects upon which the CERP is dependent are reflected in the IDS schedule, they are not included in the funding scenario. These projects are funded through other program authorities or by other entities. Restoration projects by others are also not included but are considered during planning.

Note: The IDS serves the purpose of the Master Sequencing and Implementation Plan (MISP) described in the original CERP plan (Yellow Book). Funding shown for Fiscal Year 23 (Fiscal Year, October 1-September 30) and beyond is only notional, representing approximate funding levels that would be needed to sustain the work displayed in the IDS for any particular fiscal year. The funding does not represent a commitment by the Administration to budget the amounts shown.

Four completed efforts have been removed from the 2021 IDS: foundation project, Modified Water Deliveries to Everglades National Park; CERP Picayune Strand (Southern Golden Gate Estates) Faka Union and Miller Pump Stations; and CERP Broward County Water Preserve Areas Mitigation Area A Berm.

SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) INVESTMENT THROUGH FY2020 (Millions)					
	FEDERAL			NON-FEDERAL	GRAND TOTAL
	USACE	DOI	TOTAL	MULTIPLE AGENCIES	
Modified Water Deliveries to ENP	\$ 77.5	\$ 317.3	\$ 394.8	-	\$ 394.8
Critical Projects	\$ 88.9	-	\$ 88.9	\$ 88.2	\$ 177.0
Kissimmee River Restoration	\$ 402.5	-	\$ 402.5	\$ 396.5	\$ 799.0
C&SF Non-CERP	\$ 773.7	\$ 51.8	\$ 825.5	\$ 225.1	\$ 1,050.5
C&SF CERP	\$ 1,492.9	\$ 112.5	\$ 1,605.4	\$ 1,820.5	\$ 3,425.9
C&SF CERP, to be credited	-	-	-	\$ 963.9	\$ 963.9
TOTAL SFER	\$ 2,835.5	\$ 481.6	\$ 3,317.1	\$ 3,494.1	\$ 6,811.2
Herbert Hoover Dike Restoration Strategies and ECP	\$,506.2	-	\$ 1,506.2	\$ 100.0	\$ 1,606.2
	-	-	-	\$ 2,041.6	\$ 2,041.6

IDS PROJECT LOCATIONS (NOT TO SCALE)
(Refer to Project Locator in Table)



Non-federal	Does not reflect budgetary development dollars or capability	Design, PPA Execution, Real Estate Acquisition
Federal	Expected WRDA year	Construction (Initiated by award of construction contract)
Fiscal Closeout	Project Implementation Report	Operational Plan
Monitoring	Project Implementation Report with Exemption	Operational Testing and Monitoring Period

SCAN THIS CODE FOR QUICK ACCESS TO A DIGITAL COPY OF THE IDS



IDS 2021: PLANNING ESTIMATES OF TOTAL SFER CONSTRUCTION COST

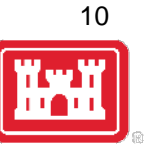


Project	FISCAL YEAR (dollars in millions) ²													
	Design & Construction Costs in Millions	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W	2031	2032 W
Planning Estimates Federal Construction Cost (SFER)++		\$ 235	\$ 250	\$ 350										
Planning Estimates Non-Federal Construction Cost (SFER)++		\$ 363	\$ 258	\$ 329	\$828	\$814	\$964	\$1,275	\$983	\$731	\$468	\$256	\$154	\$88
Planning Estimates Total Construction Cost (SFER)++		\$ 598	\$ 508	\$ 679										

**Working Draft Estimate for Total SFER Construction is
~\$8.1 billion from 2020 to 2030**



IDS 2021: GETTING THE WATER RIGHT



THE RESTORATION FRAMEWORK

OPERATIONS IN SYNC WITH PROJECT DELIVERY

Restoration activities, including operational components recommended in the CERP, occur within the context of the larger, actively operated C&SF system. The C&SF Project includes 1,000+ miles of canals and levees and several hundred water control structures and pump stations providing the C&SF Congressionally authorized purposes of flood control, water supply, navigation, regional groundwater control, prevention of saltwater intrusion, recreation, and preservation of fish and wildlife.

COMPONENTS AND PROJECTS

The CERP identified 68 components that can contribute significantly to "getting the water right" and restoring the health of the ecosystem. Through a rigorous planning process, the components described in the CERP "Yellow Book" are combined into 50+ implementable projects that become part of the Integrated Delivery Schedule (IDS).

SOM VOLUMES BY REGION



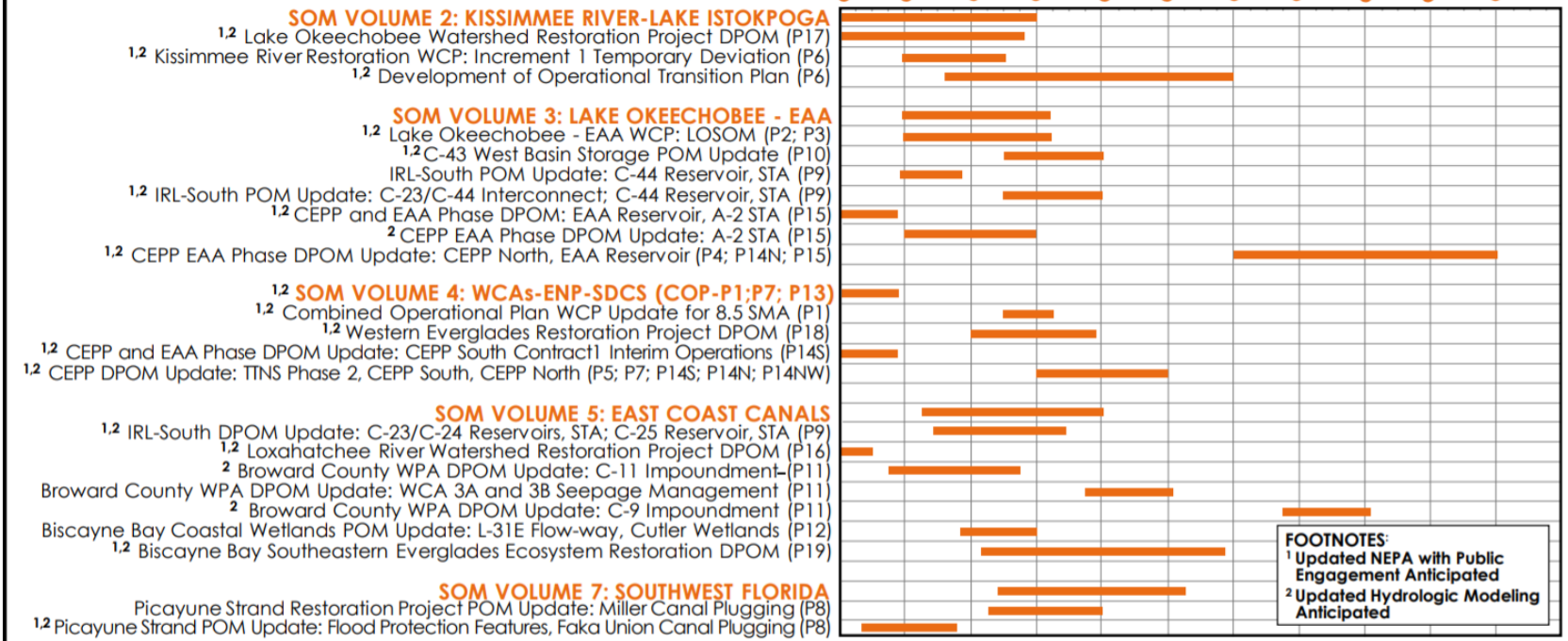
System Operating Manuals: The Critical Last Step in Getting the Water Right and Achieving Maximum System-wide Benefits

Operating Manuals are the set of documents that describe how to operate components of the C&SF Project and CERP projects to ensure the goals and purposes of the projects are achieved. Operating Manuals for the CERP consist of a System Operating Manual (SOM) and Project Operating Manuals (POMs). Draft Project Operating Manuals (DPOMs) are initially developed during the planning phase of project delivery.

- The SOM consists of 7 Volumes, organized according to geographical regions, that collectively provide a system-wide framework for the operation of components of the C&SF Project and CERP projects to ensure that projects function in a coordinated, systematic way.
- Updates to Operating Manuals: The Programmatic Regulations require that POMs be updated, as appropriate, for project construction and operational testing and monitoring phases, as well as when relevant CERP and non-CERP components come online. In turn, SOM Volumes are updated to include new or updated POMs.

IDS CONSTRUCTION RELEVANT *SCHEDULES FOR SOM VOLUME, WATER MANAGEMENT OPERATING CRITERIA (DPOM, POM, WCP), NEPA, AND MODELING

Existing water control manuals (WCMs), water control plans (WCPs), and POMs will continue to govern operations until SOM Volumes are finalized.



FOOTNOTES:
 1 Updated NEPA with Public Engagement Anticipated
 2 Updated Hydrologic Modeling Anticipated

*SOM Volume 1 (System-Wide Operational Framework for C&SF and CERP) and SOM Volume 6 (Upper St. Johns River Basin) will not have CERP POMs.

System Operating Manuals: the Critical Last Step in Getting the Water Right and Achieving Maximum System-wide Benefits



IDS 2021: TRACKING RESTORATION SUCCESS WITH RECOVER



TRACKING RESTORATION SUCCESS

The concept of Interim Goals was introduced in the authorization of the CERP and was further developed into the Programmatic Regulations and defined as “a means by which the restoration success of the Plan may be evaluated throughout the implementation process.” The regulations also required the development of Interim Targets for “evaluating the progress towards other water-related needs of the region provided for in the Plan...” (including water supply and flood protection).



Interim Goals and Targets (IGIT) provide a quantitative means of tracking performance made at specified intervals of time towards restoration of the South Florida system and for reporting progress of CERP to policy makers and the public. They also facilitate adaptive management of the system by linking science to decision-making if actual project performance towards meeting goals and targets is less than anticipated.

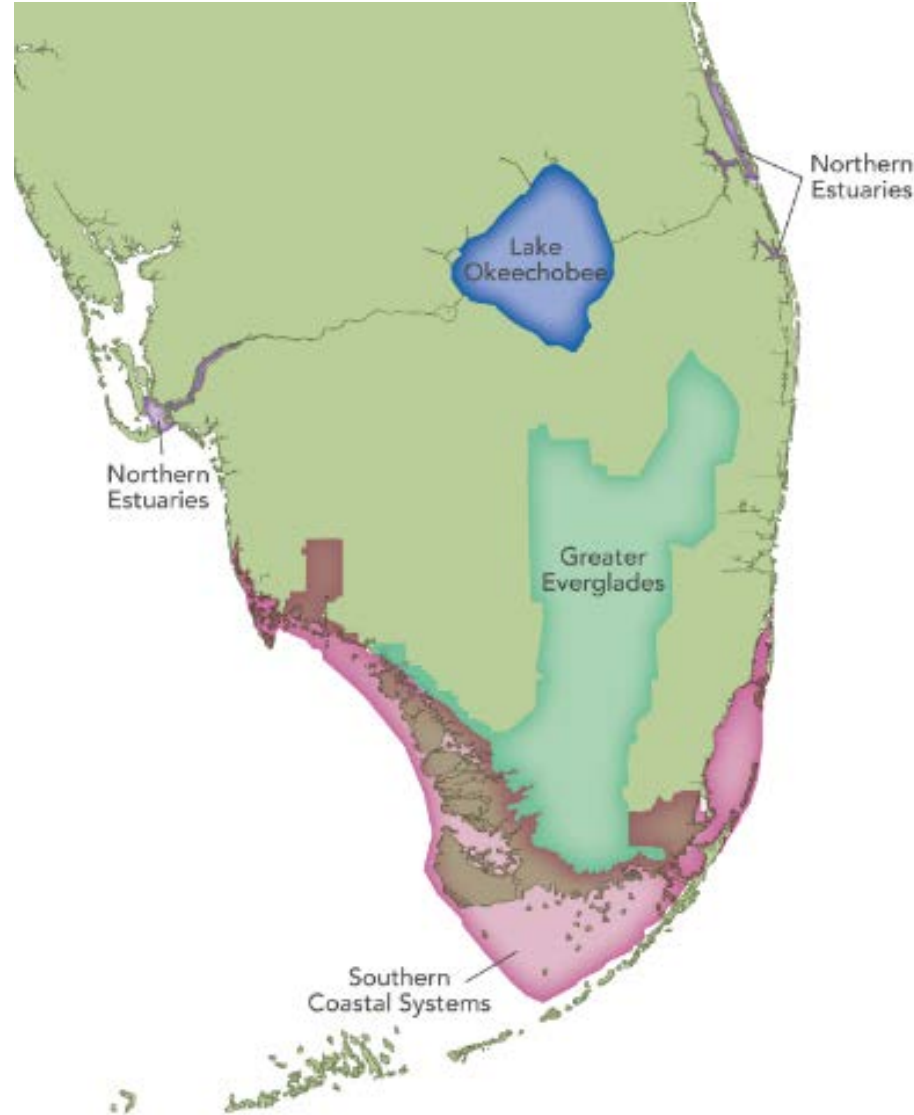


The IGIT involve the selection of indicators – key aspects of the natural, agricultural, and urbanized systems such as the ecosystem hydrology, salinity patterns, submerged aquatic vegetation, and aquatic fauna – that are monitored as CERP projects are constructed to assess progress towards the goals and purposes of CERP. The indicators selected for the IGIT represent the full range of expected changes – from upstream to downstream, from short-term to long-term, from hydrological to biological.



A combination of computer models and scientific expertise were used to predict how these indicators were expected to change as CERP is implemented (i.e., as projects are constructed and operated). These predictions were used to develop the IGIT. RECOVER provided an update to the IGIT in 2020. For more information on evaluation methodology and the RECOVER analysis, please visit: <https://www.saj.usace.army.mil/IGIT/>

In addition, to access the Report Card from the 2019 RECOVER System Status Report illustrating progress achieving ecological goals, please visit: <https://evergladesecohealth.org/>



THE RECOVER TEAM'S RECOMMENDATIONS FOR REVISIONS TO THE INTERIM GOALS AND INTERIM TARGETS FOR THE COMPREHENSIVE EVERGLADES RESTORATION PLAN: 2020



RESTORATION COORDINATION AND VERIFICATION (RECOVER)

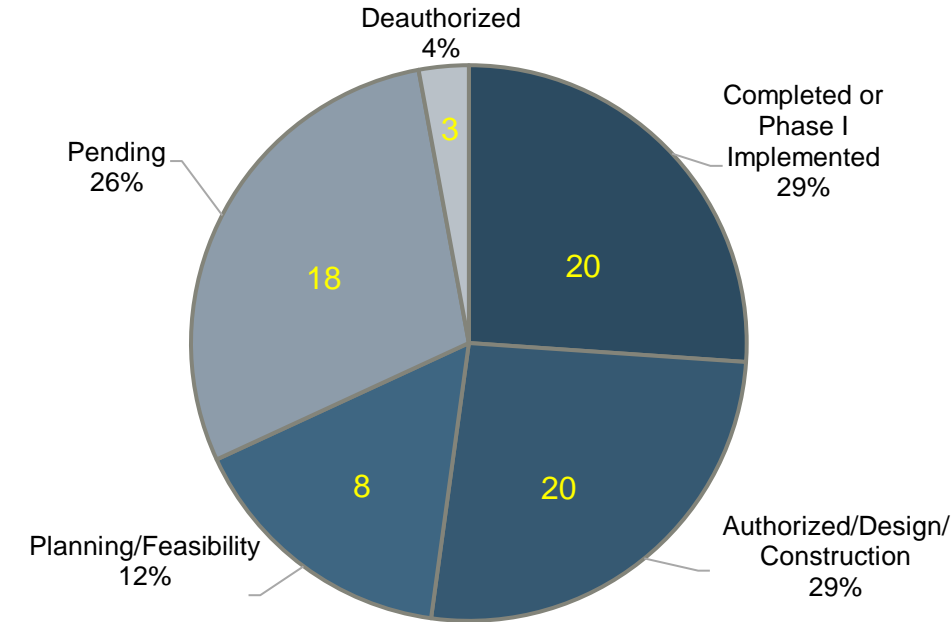
COMPREHENSIVE EVERGLADES RESTORATION PLAN

CENTRAL AND SOUTHERN FLORIDA PROJECT





IDS 2021: 68 COMPONENTS OVERALL STATUS



69 components = 100%

Note: The category of "Complete" includes components where at least one separable feature of the component has been completed/implemented. May include instances where there is a Phase II that has not yet been implemented.

Terminology Overview:

- Completed or Phase I Implemented:** partially or completely constructed and operational
- Authorized/Design/Construction:** project approved by WRDA. Start or continue implementation activities
- Planning/Feasibility:** currently evaluated for future implementation
- Deauthorized:** due to lack of funding and activity. May be considered in a future PIR
- Pending:** to be considered in an upcoming study

- The Yellow Book continues to be our roadmap
- RECOVER Regions





CELEBRATIONS OF MOMENTUM IN SOUTH FLORIDA ECOSYSTEM RESTORATION



- Combined Operations Plan - August 2020
Historic flows across the trail in 2020
Increased dry season flows in 2021
- CEPP-South Construction and Completions
- Picayune Strand – Faka Union Pumps Turned On – July 2021
- Kissimmee River Restoration Ribbon Cutting – July 2021



Happening Now and Coming Soon:

- First USACE EAA Reservoir contract award this month and groundbreaking before end of year
- C23/24 Stormwater Treatment Area Contract Award this month and groundbreaking before end of year
- C-44 Ribbon Cutting in Fall 2021
- Herbert Hoover Dike Ribbon Cutting in 2022
- LOSOM plan operational in 2023



All generations of Everglades Restoration Projects are making progress