

# 2020 UPDATE SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) INTEGRATED DELIVERY SCHEDULE SFER TASK FORCE CONSULTATION

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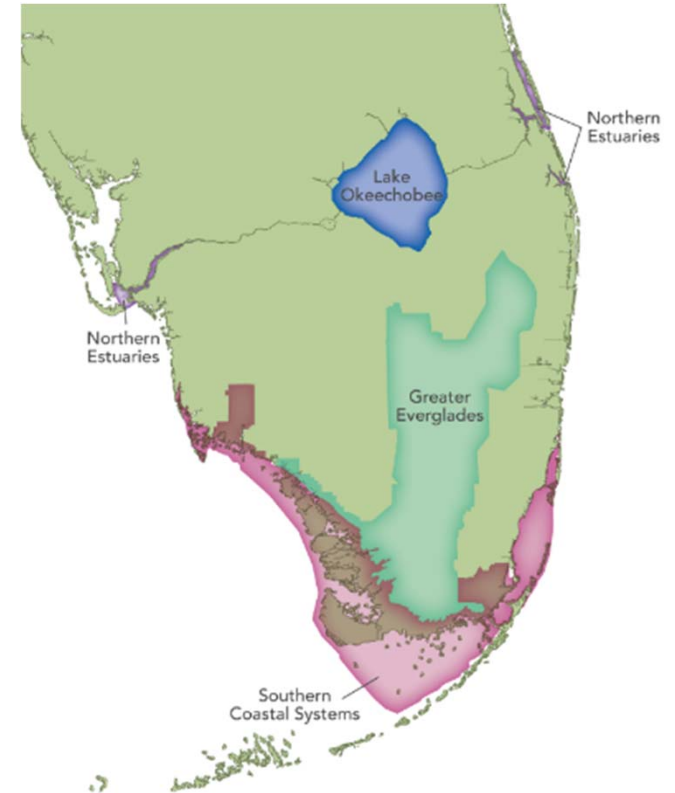


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of Engineers**®



# TODAY'S IDS BRIEF

- Overview - where we've been, where we're going
- IDS Purpose, Investments, Project Locator
- Foundation and Non-CERP Projects
- CERP Generation 1 Projects
- CERP Generation 2 Projects
- Central Everglades Planning Project and EAA Reservoir
- Planning Projects
- Operational Studies
- Status of Yellow Book Components





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



## What is new since 2019 IDS?

- Federal FY20 budget, \$235M
- Non-Federal FY20 budget, \$363M
- President's Budget for FY21, \$250M
- State of Florida's Budget for FY21, \$258M
- Annual updates to project-level scope, schedule and budget

## Key Take-Aways

- Investments through Fiscal Year 2019 (September 30, 2019)
  - SFER ~\$6 billion
  - Restoration Strategies and Everglades Construction Project ~\$2 billion
  - Herbert Hoover Dike Rehabilitation ~\$1.6 billion
- Estimate for Total SFER Construction is ~\$7.4 billion from 2020 to 2030

## Public Engagement

- Task Force Sponsored Public Engagement Workshop on 17 September 2020
- Joint Working Group and Science Coordination Group Meeting on 17 September 2020
- Available at [evergladesrestoration.gov](http://evergladesrestoration.gov) and [www.saj.usace.army.mil/Missions/Environmental/Ecosystem-Restoration/Integrated-Delivery-Schedule/](http://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 2020 Water Resources Development Act



# 2020 INTEGRATED DELIVERY SCHEDULE



# PURPOSE, INVESTMENTS, PROJECT LOCATOR AND LEGEND



## INTEGRATED DELIVERY SCHEDULE (IDS) UPDATE 2020 TASK FORCE FINAL

### SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) | CENTRAL AND SOUTHERN FLORIDA (C&SF) COMPREHENSIVE EVERGLADES RESTORATION PLAN

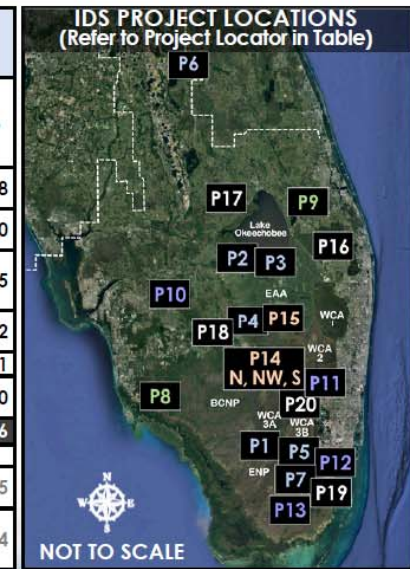
The **Comprehensive Everglades Restoration Plan (CERP)** is the largest aquatic ecosystem restoration effort in the nation, spanning over 18,000 square miles, and is designed to improve the health of more than 2.4 million acres. The Integrated Delivery Schedule (IDS) is a forward-looking snapshot of 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 22 (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.

	SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) INVESTMENT THROUGH FY2019 (Millions)				GRAND TOTAL
	FEDERAL			NON-FEDERAL MULTIPLE AGENCIES	
	USACE	DOI	TOTAL		
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	\$ 388.3	-	\$ 388.3	\$ 202.2	\$ 590.5
C&SF Non-CERP	\$ 771.8	\$ 51.8	\$ 823.6	\$ 215.6	\$ 1,039.2
C&SF CERP	\$ 1,301.6	\$ 112.5	\$ 1,414.1	\$ 1,667.0	\$ 3,081.1
C&SF CERP, to be credited	-	-	-	\$ 903.0	\$ 903.0
<b>TOTAL SFER</b>	<b>\$ 2,628.0</b>	<b>\$ 481.6</b>	<b>\$ 3,109.6</b>	<b>\$ 3,076.0</b>	<b>\$ 6,185.6</b>
Herbert Hoover Dike	\$ 1,499.5	-	\$ 1,499.5	\$ 100.0	\$ 1,599.5
Restoration Strategies and ECP	-	-	-	\$ 2,038.4	\$ 2,038.4



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



# IDS 2020: PLANNING ESTIMATES OF TOTAL SFER CONSTRUCTION COST



Project	Design & Construction Costs in Millions	FISCAL YEAR (dollars in millions) <sup>3</sup>												
		2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W
Planning Estimates Federal Construction Cost (SFER)++		\$ 109	\$ 110	\$ 235	\$ 250									
Planning Estimates Non-Federal Construction Cost (SFER)++		\$ 154	\$ 293	\$ 363	\$ 258	\$ 710	\$ 1,187	\$ 1,193	\$ 1,059	\$ 956	\$ 691	\$ 178	\$ 155	\$ 138
Planning Estimates Total Construction Cost (SFER)++		\$ 263	\$ 403	\$ 598	\$ 508									

Estimate for Total SFER Construction is ~\$7.4 billion from 2020 to 2030



# IDS 2020: NON-CERP AND FOUNDATION PROJECTS



0.5% of Estimate for Total SFER Construction from 2020 to 2030

Project		2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W
Modified Water Deliveries to Everglades National Park <sup>1,2</sup> (complete)	Non-CERP & Foundation	—●	●○○○○	○○○○●										
Herbert Hoover Dike <sup>1</sup>		—	—	—	—	—●								
Lake Okeechobee System Operating Manual <sup>1</sup>			●○○○○	○○○○○	○○○○○	○○○○●								
Restoration Strategies <sup>1</sup>		—	—	—	—	—	—	—	—●					
Tamiami Trail Next Steps Phase 2 <sup>1</sup>		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●			
Kissimmee River Restoration Construction / Post Construction Monitoring		—	—	—	—●	●△△△	△△△△	△△△△	△△△△	△△△△●	●□□□●			
Kissimmee River Restoration Monitoring/Development of Operational Transition Plan					●△△△	△△△△	△△△△	△△△△	△△△△●	●□□□●				
C-111 South Dade Construction <sup>2</sup> (complete)		—	—●	●○○○○	●□□□□	□□□□●								
C-111 South Dade - S-332 B Pump Station Replacement		●XXXXX	XXXXXX●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●			
C-111 South Dade - S-332 C Pump Station Replacement		●XXXXX	XXXXXX●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●			









# IDS 2020: CERP GENERATION 2, WRDA 2014



18.1% of Estimate for Total SFER Construction from 2020 to 2030

Project		2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W	
CERP Generation 2 (Authorized in 2014 WRDA)	Caloosahatchee River (C-43) West Basin Storage										●□□□□	□□□□●			
	Pump Station and Reservoir	=====	=====	=====	=====	=====	=====●	●○○○○○	○○○○○●						
	Broward County Water Preserve Areas														
	Mitigation Area A Berm (complete)	=====	=====●												
	C-11 Impoundment	=====	=====	=====	=====	=====●						●○○○○○	○○○○○●		
	WCA 3A & 3B Seepage Management						●=====	=====	=====		●=====	●○○○○○	○○○○○●		
	C-9 Impoundment										●=====	=====	=====	●=====	=====
	Biscayne Bay Coastal Wetlands Phase 1										●□□□□	□□□□●			
	L-31 East Flow-way S-709 Pump Station (PS)	●=====	=====	=====●	=====	=====●		●○○○○○●							
	L-31 East Flow-way S-705 PS		●=====	=====●	=====	=====		●○○○○○●							
	L-31 East Flow-way S-703 PS, S-710 PS, S-711 PS, and C-711W Seepage Canal		●=====	=====	=====●	=====		=====●	●○○○○○●						
	Cutler Wetlands			●=====	=====●	=====	=====	=====●	=====●						
	C-111 Spreader Canal Western Project (Requires PPA - To Be Reconciled in parallel to BBSEER)								●=====	●□□□□	□□□□●				



C-43 Reservoir PS



C-43 Reservoir Civil Works



BBCW



BBCW



# IDS 2020: CENTRAL EVERGLADES PLANNING PROJECT, WRDA 2016



13% of Estimate for Total SFER Construction from 2020 to 2030

Project	2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W
<b>Central Everglades Planning Project and Everglades Agricultural Area Project (2016 WRDA)</b>													
Decomp Physical Model (work performed under Master Design Agreement)	.....	.....	.....	.....●									
<b>CEPP South: Additional outlet structures needed to move more water south</b>													
Validation Report		●.....●											
Remove Old Tamiami Trail (ENP Prepared NEPA)		●.....	●.....	●.....	●○○○○●								
Structures S-631, S-632, S-633 & gap in L-67C Levee S Spoil Removal		●.....	.....●	.....	.....	.....	.....●○○	○○○○●					
Increase S-356 Pump Station			●.....	.....	.....●	.....	.....	.....	.....●	●○○○○○	○○○○●		
Spillway S-355W			●.....	.....	.....	.....●	.....	.....	●○○○○○	○○○○●			
Structure S-333N	●.....	●.....	●.....	●○○○○●									
Removal L-67C & L-67 Ext, Construct L-67D Levee and gap in L-67C Levee N					●.....	.....	.....	.....	.....●	●○○○○○	○○○○●		
Removal L-29 Levee & Backfill L-67 Extension						●.....	.....	.....	.....	.....●	●○○○○○	○○○○●	
<b>CEPP North: Inflow facilities needed to restore northern WCA-3A and move additional water south to Everglades</b>													
Validation Report				●.....	.....●								
L-4 Degrade & Pump Station S-630				●.....	.....	●.....	.....	.....	●○○○○○	○○○○●			
S-8 Pump Station Modifications				●.....	.....	●.....	.....	.....	●○○○○○	○○○○●			
L-6 Diversion				●.....	●.....	.....	.....	.....	●○○○○○	○○○○●			
Miami Canal Backfill/Tree Islands					●.....	.....	●.....	.....	.....	●○○○○○	○○○○●		
L-5 Canal Improvements					●.....	.....	●.....	.....	.....	●○○○○○	○○○○●		
<b>CEPP New Water: Moves New Water South, Stores It, and Treats It Before Going to the Everglades</b>													
Validation Report				●.....	.....●								
Seepage Barrier L-31N						●.....	.....	.....	.....	●○○○○○	○○○○●		



# IDS 2020: CENTRAL EVERGLADES PLANNING PROJECT, WRDA 2016



S-333 N and Old Tamiami Trail



# IDS 2020: EVERGLADES AGRICULTURAL RESERVOIR, WRDA 2018

45.8% of Estimate for Total SFER Construction from 2020 to 2030

Project	2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W
<b>CERP EAA: Moves New Water South, Stores It, and Treats It Before Going to the Everglades (WRDA 2018)</b>													
CERP EAA Follow Up Report (Section 1308b, WRDA18)		●●●●●●	●●●●●●										
EAA Reservoir - A-2 STA		●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●					
EAA Reservoir - Canal Conveyance Improvements to North New River and Miami River Canals				●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●					
EAA Reservoir - Seepage Canal (8.2 miles)			●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●					
EAA Reservoir - Inflow/Outflow Canal and Gated Spillway				●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●		
EAA Reservoir - Cutoff Wall, Outlet Work Structures, & Embankment			●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	
EAA Reservoir - Inflow Pump Station			●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●	●●●●●●		

**South Florida Water Management District** @SFWMD - Sep 3  
 [ICYMI] #EAAReservoir Project milestone: "With the help of 4,000 pounds of explosives, we took another major step to reduce harmful estuary discharges to our estuaries and get more clean water in the #Everglades." -SFWMD Chairman @ChaunceyGoss. Learn more: [sfwmd.link/2EM4oAO](https://sfwmd.link/2EM4oAO)





# IDS 2020: PLANNING PROJECTS



Project	2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W
Loxahatchee River Watershed Restoration Project	XXXXXX	XXXXXX	XXXXXX●		Anticipate Authorization in WRDA 2020. Construction and funding TBD.								
Lake Okeechobee Watershed Restoration Project	XXXXXX	XXXXXX	XXXXXX	XXXXXX●		Anticipate Authorization in WRDA 2022. Construction and funding TBD.							
Western Everglades Restoration Project	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX●	Anticipate Authorization in WRDA 2022. Construction and funding TBD.							
Biscayne Bay Southeastern Everglades Ecosystem Restoration (BBSEER)			●XX	XXXXXX	XXXXXX	XXXXXX	XXXXXX●	Anticipate Authorization in WRDA 2026. Construction & funding TBD.					
Southern Everglades						●XXXXX	XXXXXX	XXXXXX	XXXXXX●	Anticipate Authorization in WRDA 2026. Construction & funding TBD.			



LTG Todd Semonite @ESSAYONS54 · Apr 16

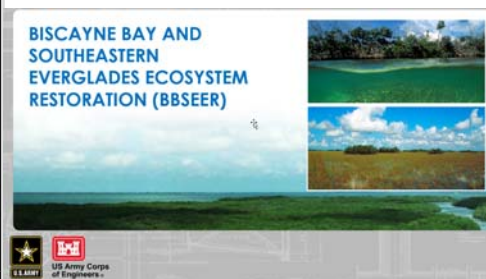
The Chief's Report for the Loxahatchee River Watershed Restoration Project has been SIGNED! Thanks to the @JaxStrong team for all your efforts to reach this important milestone. ESSAYONS!



COMPREHENSIVE EVERGLADES RESTORATION PLAN  
LAKE OKEECHOBEE WATERSHED  
RESTORATION PROJECT  
FINAL INTEGRATED PROJECT  
IMPLEMENTATION REPORT  
AND ENVIRONMENTAL  
IMPACT STATEMENT



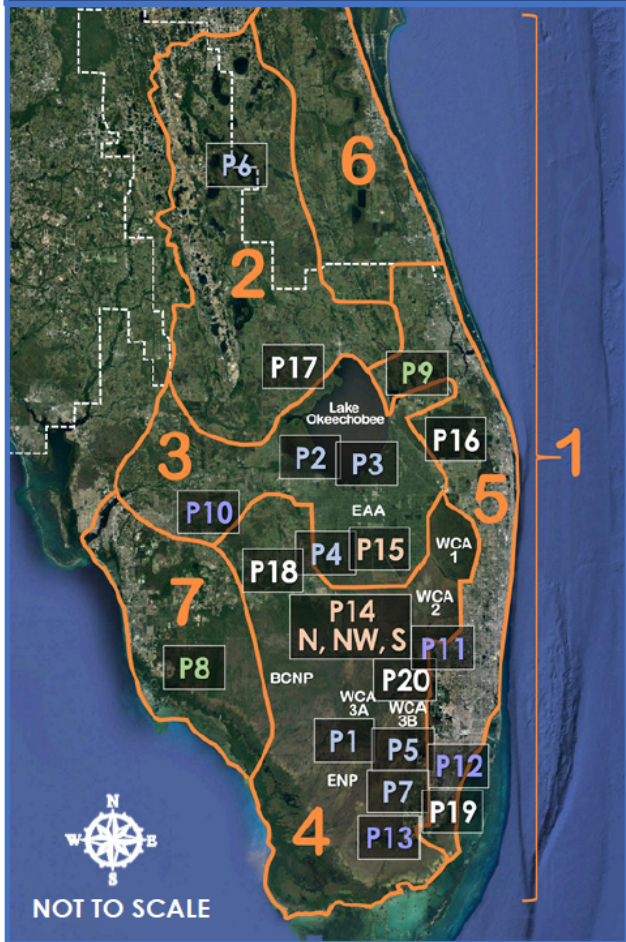
August 2020





# IDS 2020: GETTING THE WATER RIGHT

## SOM VOLUMES BY REGION



## THE RESTORATION FRAMEWORK 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).

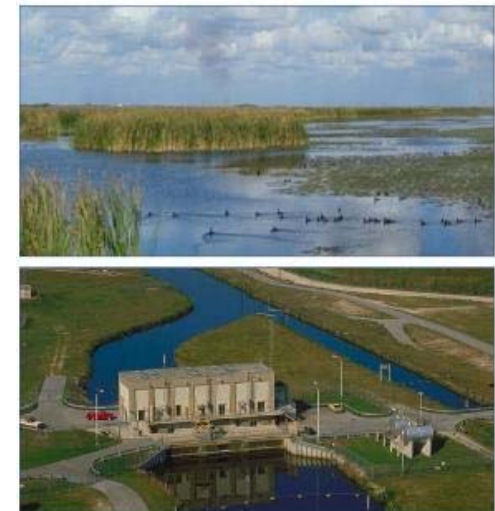
### OPERATIONS IN SYNC WITH PROJECT DELIVERY

Restoration activities, including operational components recommended in the CERP, occur within the context of the larger, actively operated C&SF system. The current C&SF Project includes 1,000 miles of canals, 720 miles of levees, and several hundred water control structures providing services to south Florida such as water supply, flood protection, regional groundwater control, preservation of fish and wildlife, navigation, recreation, and prevention of saltwater intrusion.

### 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 that 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.
- The CERP 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. This helps ensure that the goals and purposes of the CERP are achieved.

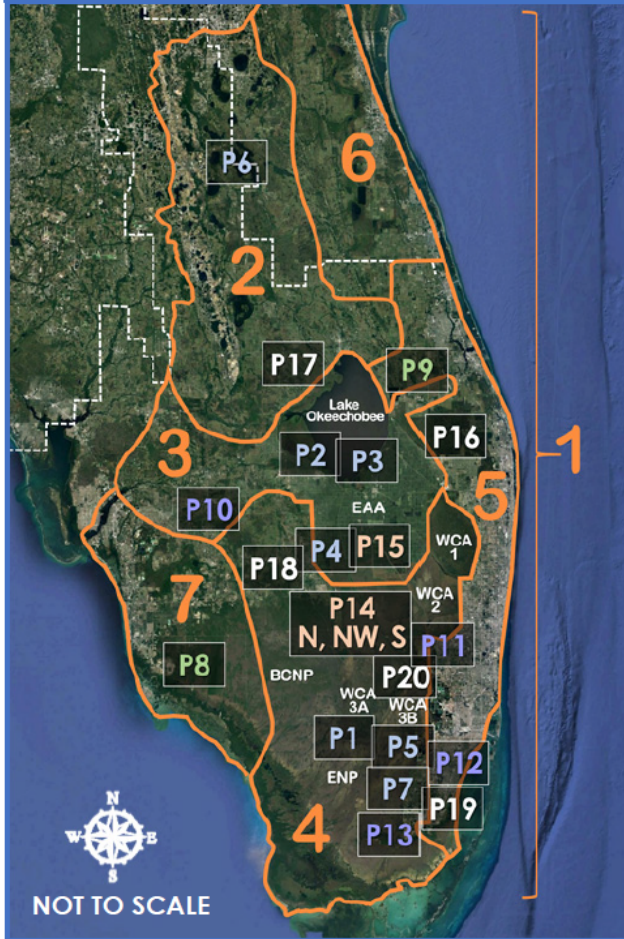




# IDS 2020: GETTING THE WATER RIGHT



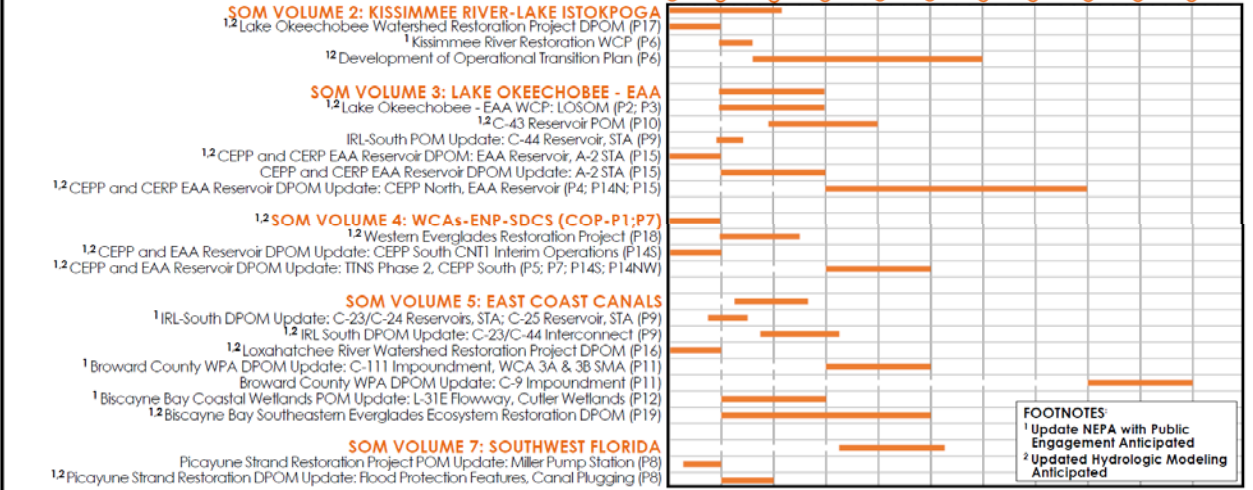
## SOM VOLUMES BY REGION



## SYSTEM OPERATING MANUALS: THE CRITICAL LAST STEP IN GETTING THE WATER RIGHT AND ACHIEVING MAXIMUM SYSTEM-WIDE BENEFITS

### 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:**  
<sup>1</sup> Update NEPA with Public Engagement Anticipated  
<sup>2</sup> 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.



# IDS 2020: ECOLOGICAL RESPONSE



**EVERGLADES REPORT CARD**

The 2019 RECOVER System Status Report provided a Report Card illustrating progress in achieving ecological goals in each RECOVER region, and on a system-wide basis. Grading reflects the level of vulnerability to further degradation and the ability to provide ecosystem function:

- 80-100 Very Good
- 60-80 Good
- 40-60 Fair
- 20-40: Poor
- 0-20: Very Poor

The system-wide grade as of 2017 was 45%, or fair. For the Everglades, this is concerning because it means the ecosystem is struggling to support the plants and animals that live there and the natural services they provide to people. However, many projects and operating manual updates are scheduled for the next ten years that will help improve these conditions. For more information about grading and methodology, visit: [evergladesecohealth.org](http://evergladesecohealth.org)

- **2019 System Status Report:**

- CERP aims to restore the characteristics of a **hydrologically integrated Everglades**, which will provide the best habitat for plants and animals, leading to a healthy Everglades system.
- The results achieved by individual projects such as Picayune Strand, Biscayne Bay Coastal Wetlands Part 1, and the bridging of Tamiami Trail are encouraging. Taken together, these regional activities are critical to managing the trans-boundary conditions that are essential to **system-wide health**.
- These projects provide insight into what can be achieved at larger scales but are currently limited in their scale and influence. Restoring the historical hydrologic characteristics of the Everglades **awaits further progress on larger-scale projects now underway or in the planning stages**.





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- **Resiliency, Sea Level Rise and Climate Change**
  - Despite the challenges that may lay ahead to deal with the potential effects of sea level rise and climate change on the human and natural environment of south Florida, the overwhelming consensus by scientific experts is that **restoration of the Everglades, as envisioned in the CERP, is the best defense against adverse effects of sea level rise and climate change.**
  - The preservation of the water resources of south Florida, the restoration of the natural flows and functions of the south Florida ecosystem, and the increase in spatial extent of wetland and natural areas **offer the best hope for a resilient Everglades ecosystem that can better adapt to future changes.**



# IDS 2020: STATUS OF YELLOW BOOK COMPONENTS

- The Yellow Book continues to be our roadmap
- 68+ components
- RECOVER Regions





# KEY MESSAGES



- 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 this natural resource treasure.
- With Support from Congress and the State of Florida We Have Accomplished Big Things for America’s Everglades and Our Economy
- A healthy and resilient Everglades directly supports our economy and sustainability
- With Continued Support from Congress and the State of Florida, We Will Accomplish More
- Continued success depends upon:
  - Everglades science
  - Timely authorizations and funding
  - Successful partnerships, collaboration, and leadership

