

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

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

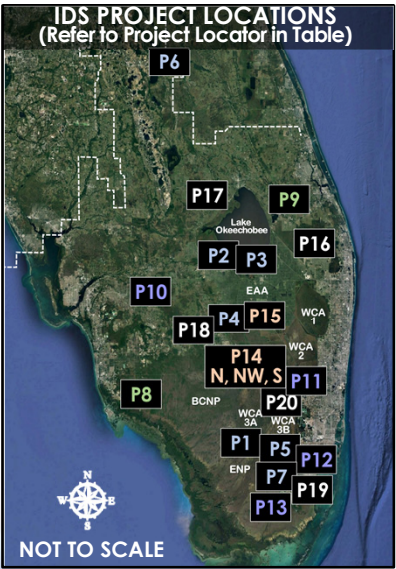
The **Comprehensive Everglades Restoration Plan (CERP)** is the largest aquatic ecosystem restoration effort in the nation, spanning over 18,000 square miles, and is designed to improve the health of more than 2.4 million acres. The Integrated Delivery Schedule (IDS) is a forward-looking snapshot of 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)					
	FEDERAL			NON-FEDERAL MULTIPLE AGENCIES	GRAND TOTAL
	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
TOTAL SFER	\$2,628.0	\$ 481.6	\$ 3,109.6	\$3,076.0	\$ 6,185.6
Herbert Hoover Dike Restoration Strategies and ECP	\$1,499.5	-	\$1,499.5	\$ 100.0	\$1,599.5
	-	-	-	\$2,038.4	\$ 2,038.4



LEGEND

Non-federal

Federal

Fiscal Closeout

Monitoring

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W

●XXXX●

●XXXX●

Does not reflect budgetary development dollars

Expected WRDA year

Project Implementation Report

Project Implementation Report with Waiver

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Design, PPA Execution, Real Estate Acquisition

Construction (Initiated by award of construction contract)

Operational Plan

Operational Testing and Monitoring Period

PROJECT LOCATOR	YELLOW BOOK COMPONENTS	PROJECT	FISCAL YEAR /COSTS (DOLLARS IN MILLIONS) ¹													
Refer to Map on this Page	Refer to Map on Page 2	Planning Estimates Federal Construction Cost (SFER)++	2018 W	2019	2020 W	2021	2022 W	2023	2024 W	2025	2026 W	2027	2028 W	2029	2030 W	
		Planning Estimates Non-Federal Construction Cost (SFER)++	\$ 109	\$ 110	\$ 235	\$ 250										
		Planning Estimates Total Construction Cost (SFER)++	\$ 154	\$ 293	\$ 363	\$ 258	\$ 710	\$ 1,187	\$ 1,193	\$ 1,059	\$ 956	\$ 691	\$ 178	\$ 155	\$ 138	
NON-CERP AND FOUNDATION PROJECTS																
P1	NON-CERP	Modified Water Deliveries to Everglades National Park ^{2,3} (complete)	●	●●●●●	●●●●●											
P2	NON-CERP	Herbert Hoover Dike ²	●	●	●	●	●									
P3	NON-CERP	Lake Okeechobee System Operating Manual ²		●●●●●	●●●●●	●●●●●	●●●●●									
P4	NON-CERP	Restoration Strategies ²	●	●	●	●	●	●	●	●						
P5	NON-CERP	Tamiami Trail Next Steps Phase 2 ²		●●●●●	●●●●●					●	●●●●●					
P6	NON-CERP	Kissimmee River Restoration (KRR) Construction / Post-Construction Monitoring	●	●	●	●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●					
	NON-CERP	KRR Monitoring/Development of Operational Transition Plan	●	●	●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●					
P7	NON-CERP	C-111 South Dade Construction ³ (complete)	●	●	●●●●●	●●●●●	●●●●●									
	NON-CERP	C-111 South Dade - S-332 B Pump Station Replacement		●●●●●	●●●●●	●●●●●	●●●●●	●	●	●	●●●●●					
	NON-CERP	C-111 South Dade - S-332 C Pump Station Replacement		●●●●●	●●●●●	●●●●●	●●●●●	●	●	●	●●●●●					
CERP GENERATION 1: AUTHORIZED (WRDA 2007) AND PROJECT PARTNERSHIP AGREEMENT (PPA) EXECUTED																
P8	OPE	Picayune Strand Restoration								●●●●●	●●●●●					
	OPE	Faka Union Pump Station (complete)	●●●●●													
	OPE	Miller Pump Station (complete)	●●	●●●●●	●●●●●											
	OPE	Flood Protection Features - Conveyance		●●●●●	●●●●●	●	●	●	●●●●●							
	OPE	Flood Protection Features - Levee		●●●●●	●●●●●	●	●	●								
	OPE	Road Removal		●		●										
	OPE	Canal Plugging				●●●●●	●	●	●							
P9		Indian River Lagoon-South														
	B	C-44 Reservoir	●	●	●	●	●	●●●●●								
	B	C-44 STA and Pump Station	●	●	●●●●●	●●●●●	●●●●●									
	UU PHASE 1	C-23/24 Reservoir North	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●	●	●	●	●	●	●●●●●	●	
	UU PHASE 1	C-23/24 Reservoir South			●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●	●	●	●	●	●	
	UU PHASE 1	C-23/24 STA			●●●●●	●●●●●	●	●	●	●	●●●●●					
	UU PHASE 2	C-25 Reservoir					●●●●●	●●●●●	●	●	●	●	●	●●●●●	●	
	UU PHASE 2	C-25 STA							●●●●●	●●●●●	●●●●●	●	●	●	●	
		C-23/C-44 Interconnect			●●●●●	●●●●●	●●●●●	●	●	●●●●●						
		Natural Water Quality Storage Areas, Muck Removal and Artificial Habitat Creation (Phase 2) - PACR and PPA				●●●●●	●●●●●	●●●●●								
CERP GENERATION 2: AUTHORIZED (WRDA 2014) AND PPA EXECUTED EXCEPT WHERE NOTED																
P10		Caloosahatchee River (C-43) West Basin Storage									●●●●●	●●●●●				
	D	Pump Station and Reservoir	●	●	●	●	●	●	●●●●●	●●●●●						
P11		Broward County Water Preserve Areas														
	Q	Mitigation Area A Berm (complete)	●	●												
	Q	C-11 Impoundment	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●	●	●	●	●	●●●●●	●●●●●		
	O	WCA 3A and 3B Seepage Management						●●●●●	●●●●●	●●●●●	●	●	●●●●●	●●●●●		
	R	C-9 Impoundment									●●●●●	●●●●●	●●●●●	●	●	
P12	FFF/OPE PHASE 1	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, C-711W Seepage Canal		●●●●●	●●●●●	●	●	●	●●●●●							
		Cutler Wetlands			●●●●●	●●●●●	●	●	●●●●●							
P13	WW PHASE 1	C-111 Spreader Canal Western Project (Requires PPA - to be reconciled in parallel to BBSEER)							●●●●●	●●●●●	●●●●●					
FISCAL YEAR REPEATED FOR VIEWING REFERENCE			2018 W	2019	2020 W	2021	2022 W	2023	2024W	2025	2026 W	2027	2028 W	2029	2030 W	
CEPP AUTHORIZED (WRDA 2016); CERP EAA AUTHORIZED (WRDA 2018); CEPP SOUTH PPA EXECUTED IN 2020; EAA PPA ANTICIPATED IN 2021; CEPP NORTH PPA ANTICIPATED IN 2022																
P14		Central Everglades Planning Project (WRDA 2016)														
	QQ	Decomp Physical Model (work under Master Design Agreement)	●●●●●	●●●●●	●●●●●	●●●●●										
P14S	AA/FF/H/QQ	CEPP South														
		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 and L-67 Ext, Construct L-67D Levee and gap in L-67C Levee N					●●●●●	●●●●●	●	●	●	●●●●●	●●●●●			
		Removal L-29 Levee and Backfill L-67 Ext					●●●●●	●●●●●	●	●	●	●●●●●	●●●●●	●●●●●		
P14N	QQ/II	CEPP North														
		Validation Report				●●●●●	●●●●●									
		L-4 Degrade and Pump Station S-630				●●●●●	●●●●●	●	●	●	●●●●●	●●●●●				
		S-8 Pump Station Modifications				●●●●●	●●●●●	●	●	●	●●●●●	●●●●●				
		L-6 Diversion				●●●●●	●	●	●	●	●●●●●	●●●●●				
		Miami Canal Backfill/Tree Islands				●●●●●	●●●●●	●	●	●	●●●●●	●●●●●	●●●●●			
		L-5 Canal Improvements				●	●●●●●	●●●●●	●	●	●	●●●●●	●●●●●			
P14NW	V	CEPP New Water														
		Validation Report				●●●●●	●●●●●									
		Seepage Barrier L-31N						●●●●●	●●●●●	●	●	●●●●●	●●●●●			
P15	G/V/C/E	CERP EAA (WRDA 2018)														
		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, and Embankment ⁴			●●●●●	●●●●●	●●●●●	●	●	●	●	●	●●●●●	●●●●●		
		EAA Reservoir - Inflow Pump Station ⁴			●●●●●	●●●●●	●●●●●	●	●	●	●	●●●●●	●●●●●			
PLANNING PHASE INITIATED AND/OR PROPOSED																
P16	K/OPE	Loxahatchee River Watershed Restoration Project (WRDA 2020 Authorization Anticipated; Construction and Funding TBD)	●●●●●	●●●●●	●●●●●	●										
P17	A/GG	Lake Okeechobee Watershed Restoration Project (WRDA 2022 Authorization Anticipated; Construction and Funding TBD)	●●●●●	●●●●●	●●●●●	●●●●●	●									
P18	RR/CCC	Western Everglades Restoration Project (WRDA 2022 Authorization Anticipated; Construction and Funding TBD)	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●								
P19	BBB/FF/HHH/WW/XX/OPE	Biscayne Bay Southeastern Everglades Ecosystem Restoration (BBSEER)			●XX	●●●●●	●●●●●	●●●●●	●●●●●							
P20	BB/CC/EEE/GG/QQ/S/U/YY/ZZ	Southern Everglades						●●●●●	●●●●●	●●●●●	●●●●●					
												FOOTNOTES				
												¹ Once authorized, the design and construction of current planning projects will increase annual estimates and extend beyond 2030.				
												² Funded through other program authorities or by other entities.				
												³ Biological Opinion (BO): Completion satisfies BO mandate.				
												⁴ Requires WCA-3 outlet and conveyance structures to maximize operational flexibility				

FOOTNOTES

¹ Once authorized, the design and construction of current planning projects will increase annual estimates and extend beyond 2030.

² Funded through other program authorities or by other entities.

³ Biological Opinion (BO): Completion satisfies BO mandate.

⁴ Requires WCA-3 outlet and conveyance structures to maximize operational flexibility

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

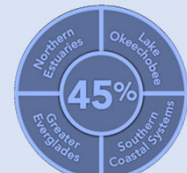
Operating Manuals are the set of documents that describe how to operate components of the C&SF Project and CERP projects to ensure that the goals and purposes of the projects are achieved. Operating Manuals for the CERP consist of a System Operating Manual (SOM) and Project Operating Manuals (POMs). 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.



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 for the 2012 - 2017 assessment period 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.

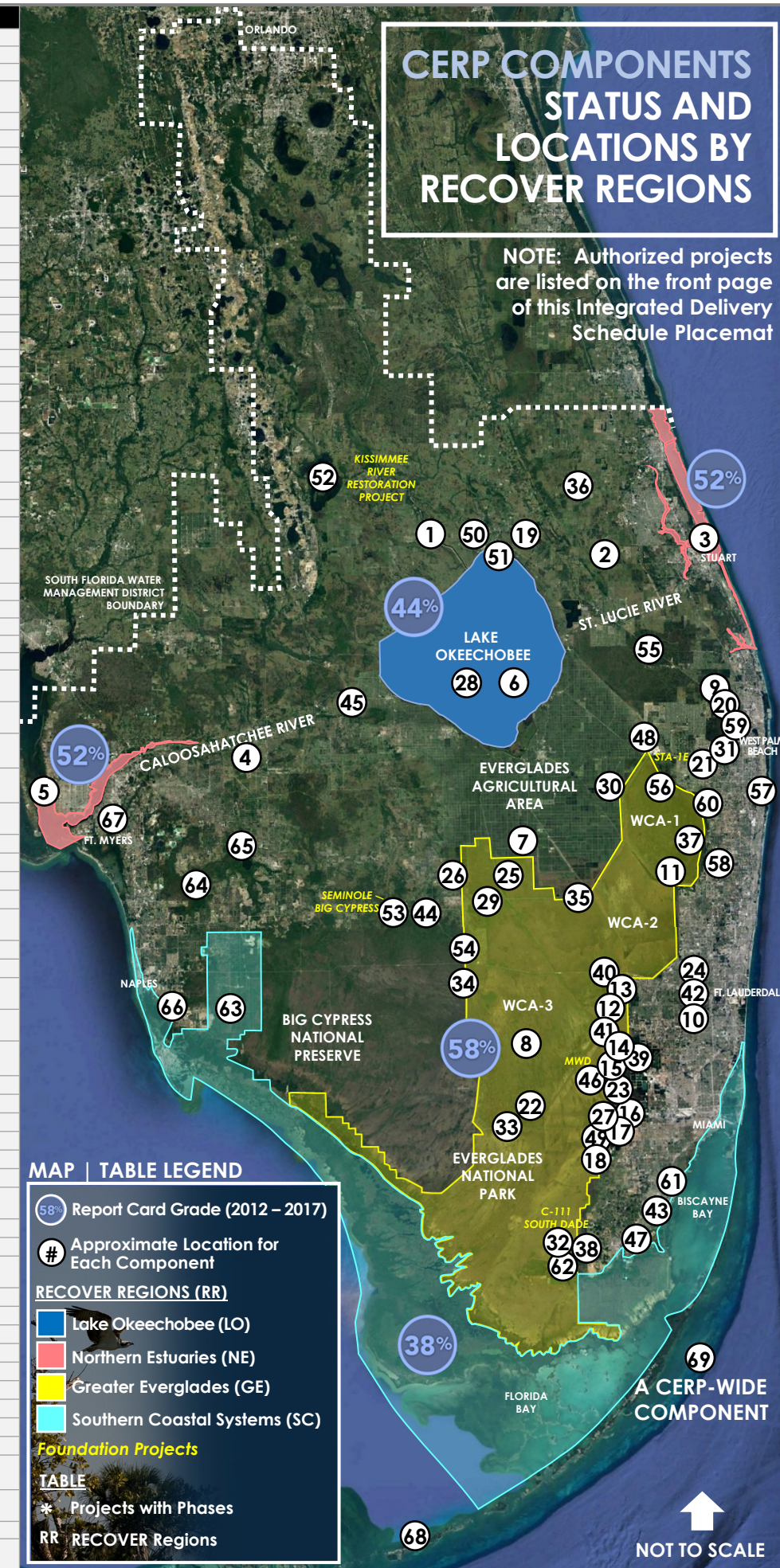
However, many projects and operating manual updates are scheduled for the next ten years that will help improve these conditions.

For more information about grading and methodology, visit: evergladesecohealth.org

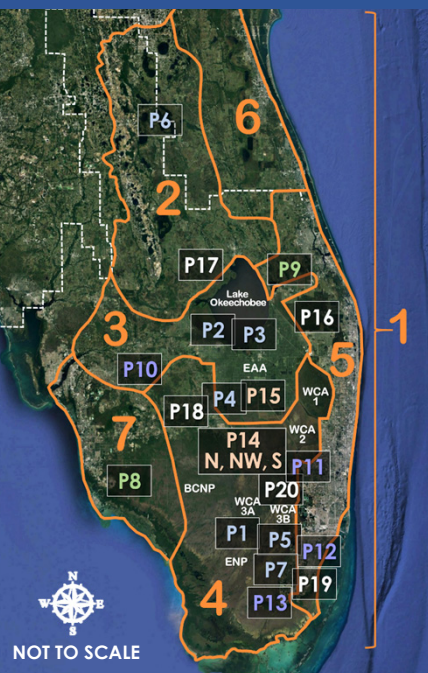
#	RR	YELLOW BOOK NAME AND CODE
10	SC	Change Coastal Wellfield Operations (L)
11	GE	Site 1 Impoundment with ASR* (M)
16	GE	C-4 Structures (T)
19	LO	Taylor Creek/Nubbin Slough Storage and Treatment Area* (W)
38	SC	C-111 Spreader Canal* (WW) – Phase 2 in Planning
42	GE	Lower East Coast Water Conservation (AAA)
48	GE	C-51* and Southern L-8 Reservoir (GGG)
50	LO	Lake Okeechobee Watershed Water Quality Treatment Facilities (OPE)
53	GE	Seminole Tribe Big Cypress Water Conservation Plan (East and West)* (OPE)
56	GE	Acme Basin B (OPE)
57	NE	Lake Worth Lagoon Restoration (OPE)
58	GE	Winsberg Farms Wetlands Restoration (OPE)
64	GE	Southern CREW Project Addition (OPE)
65	GE	Lake Trafford Restoration (OPE)
66	GE	Henderson Creek/Belle Meade Restoration (OPE)
67	GE	Lake Park Restoration (OPE)
68	SC	Florida Keys Tidal Restoration (OPE)
69	ALL	Melaleuca Eradication and Other Exotic Plants (OPE)
2	NE	St. Lucie/C-44 Basin Storage Reservoir (B)
3	NE	Environmental Water Supply Deliveries to St. Lucie Estuary (C)
4	NE	Caloosahatchee Basin Storage Reservoir with ASR* (D)
5	NE	Environmental Water Supply Deliveries to Caloosahatchee Estuary (E)
7	GE	EAA Storage Reservoir (G)
8	GE	Everglades Rain-Driven Operations* (H)
12	GE	Water Conservation Area 3A and 3B Levee Seepage Management (O)
13	GE	Western C-11 Diversion Impoundment and Diversion Canal (Q)
14	GE	C-9 Stormwater Treatment Area/Impoundment (R)
18	GE	L-31N Improvements for Seepage Management (V)
22	GE	Additional S-345 Structures* (AA)
27	GE	Construction of S-356 A and B Structures* (FF)
29	GE	Pump Station G-404 Modification (II)
32	SC	Modification to SDCS in southern portion of L-31N and C-111 (OO)
33	GE	Decomartmentalization of Water Conservation Area 3* (QQ)
36	NE	C-23, C-24, C25 and Northfork and Southfork Basins Storage Reservoirs (UU)
61	SC	Biscayne Bay Coastal Wetlands* (OPE) – Phase 2 in Planning
63	SC	Southern Golden Gate Estates Hydrologic Restoration (OPE)
6	LO	Lake Okeechobee Regulation Schedule* (F)
15	GE	Central Lakebelt Storage Area (S)
17	GE	Bird Drive Recharge Basin (U)
20	GE	C-17 Backpumping (X)
21	GE	C-51 Backpumping to West Palm Beach Water Catchment Area (Y)
23	GE	Dade Broward Levee/Pennsuco Wetlands (BB)
24	GE	Broward County Secondary Canal System (CC)
25	GE	Modified Holy Land Wildlife Management Area Water Management Operations (DD)
26	GE	Modified Rotenberger Wildlife Management Area Water Management Operations (EE)
30	GE	Loxahatchee National Wildlife Refuge Internal Canal Structures (KK)
31	GE	C-51 Regional Groundwater ASR (LL)
37	GE	Palm Beach County Agricultural Reserve Reservoir (VV)
40	GE	Divert WCA2 flows to Central Lake Belt Storage (YY)
41	GE	Divert WCA3 flows to Central Lake Belt Storage Area (ZZ)
45	NE	Caloosahatchee Backpumping with STA (DDD)
46	GE	Flows to Eastern Water Conservation Area (EEE)
51	LO	Lake Okeechobee Tributary Sediment Dredging/Phosphorus Removal (OPE)
52	LO	Lake Istokpoga Regulation Schedule Modification (OPE)
54	GE	Miccosukee Water Management Plan (OPE)
62	SC	Restoration of Pineland & Hardwood Hammocks in C-111 Basin (OPE)
1	LO	North of Lake Okeechobee Storage Reservoir (A)
9	GE	L-8 Project (K)
28	LO	Lake Okeechobee Aquifer Storage and Recovery* (GG)
34	GE	Flow to Central Water Conservation Area 3A (RR)
39	GE	North Lake Belt Storage Area (XX)
43	GE	South Miami Dade County Reuse (BBB)
44	GE	Big Cypress/L-28 Interceptor Modification (CCC)
47	SC	Biscayne Bay Coastal Canals (FFF)
49	SC	West Miami Dade Reuse (HHH)
55	GE	Pal Mar and J.W. Corbett Wildlife Management Area Hydropattern Restoration (OPE)
60	GE	Protect and Enhance Existing Wetlands Systems along Lox (Strazzulla Tract) (OPE)
35	SC	Re-route Miami-Dade Water Supply Deliveries (SS)
59	GE	Palm Beach County Wetlands-based Water Reclamation (OPE)

CERP COMPONENTS STATUS AND LOCATIONS BY RECOVER REGIONS

NOTE: Authorized projects are listed on the front page of this Integrated Delivery Schedule Placemat

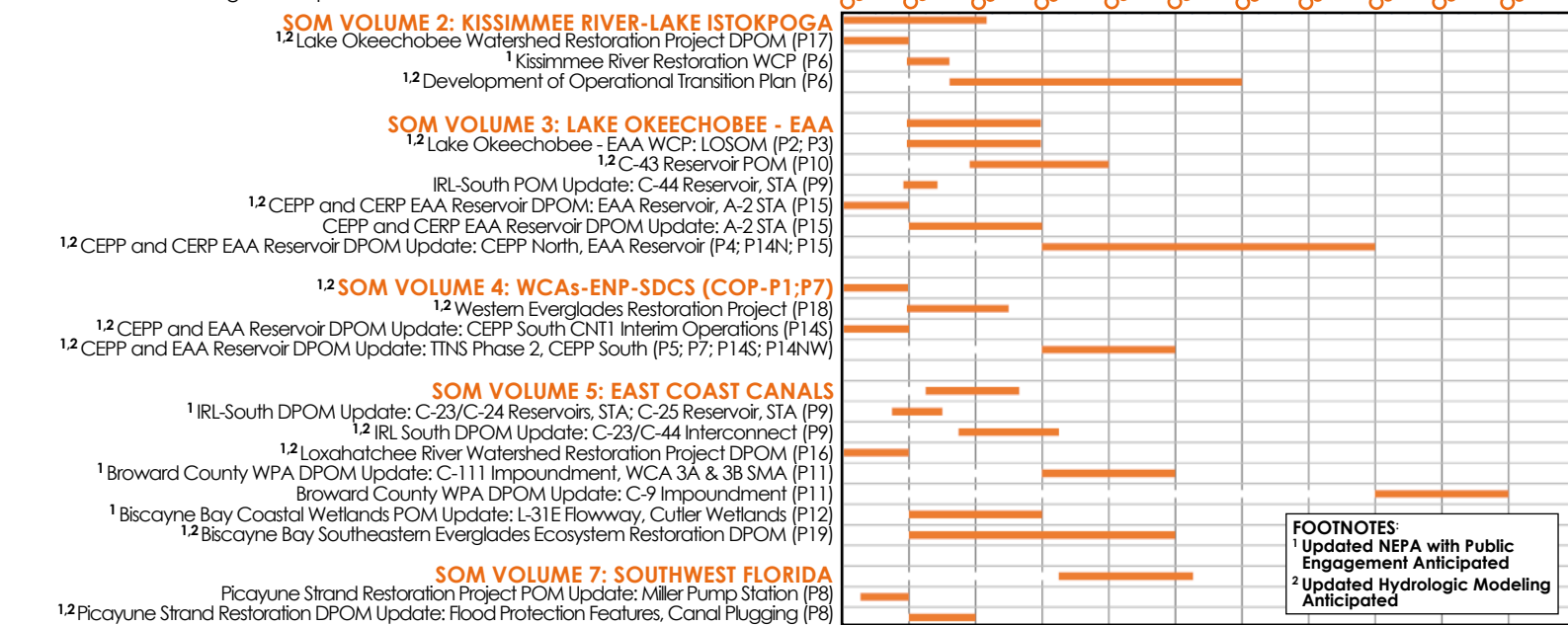


SOM VOLUMES BY REGION



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.



*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.