

# INTEGRATED DELIVERY SCHEDULE (IDS) SFER PROGRAM SNAPSHOT THROUGH 2030 JULY 2018 UPDATE

## Changes from the December 2016 IDS

- Shifted Modified Water Deliveries Project construction to FY18 and completion of the Combined Operating Plan to FY20.
- Completion of Tamiami Trail Next Steps Phase 1 accelerated to FY19. Phase 2 design in FY18-19 and construction in FY20-21 line item added.
- Kissimmee River Restoration added required 5-year monitoring from FY21-25 with fiscal closeout in FY26.
- West Palm Beach Canal/STA-1E physical construction extended into FY17 with fiscal closeout in FY18.
- C-111 South Dade Project added 2 years for development of Combined Operational Plan (COP).
- Picayune Strand Restoration Project Operations, Testing, Monitoring period (OTMP) for Faka Union pump station complete in FY18; Miller Pump Station construction complete in FY18 and OTMP shifted from FY18 to FY20; flood protection features shifted to Corps and extended from FY18 to FY22; canal plugging construction shifted to Corps and extended from FY19-20 to FY22-23. Road removal north of the Tieback levee shifted to Corps and accelerated from FY19-20 to FY18-19.
- Indian River Lagoon-South C-44 Reservoir construction completion extended from FY19 to FY20 and OTMP extended to FY22; C-23/24 Reservoir South initiation of design shifted from FY19 to FY22 to maintain federal \$200M/year funding cap. C-25 Reservoir shifted from FY21-22 to maintain State \$200M/year funding cap.
- Caloosahatchee River (C-43) West Basin Storage added OTMP.
- Broward County Water Preserve Area line item for Mitigation Area A Berm construction in FY17-18 added; WCA-3A Seepage Management design shifted from FY18-19 to FY24-25 and construction shifted from FY20-21 to FY26-27; C-9 Impoundment design shifted from FY24-25 to FY27-28 and construction shifted from FY26-29 to FY29-32 to maintain federal \$200M/year funding cap.
- Biscayne Bay Coastal Wetlands L-31 East Flow-way construction extended from FY21 to FY22; line item added for construction of culverts by SFWMD in FY18-19.
- Central Everglades Planning Project PPA South Validation Report completion extended from FY18 to FY20; SFWMD design and construction of S-333 added FY18-20; planning of EAA Reservoir (component G) added FY18.
- Lake Okeechobee Watershed Restoration study extended to FY19; Western Everglades Restoration study extended to FY20.
- Lake Okeechobee Regulation Schedule Revision accelerated to FY19-22 (to sync with accelerated schedule of HHD) dependent upon FY19 funding.

Modifications to the IDS include changes based on weather-related conditions, executions of contracts, and funding levels.

NOTE: The funding shown for FY19 and beyond is only notional, representing approximate funding levels that would be needed to sustain the work displayed in the IDS for any particular FY. The funding does not represent a commitment by the Administration to budget the amounts shown.

Project	Yellow Book Components	FISCAL YEAR														
		2016	2017	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)++		126	106	106	68	150	108	155	192	205	197	141	130	143	197	93
Planning Estimates Non-Federal Construction Cost (SFER)++		85	110	154	215	212	216	164	199	141	200	152	68	100	100	123
Planning Estimates Total Construction Cost (SFER)++		211	216	260	283	362	324	319	391	346	397	293	198	243	297	216
Modified Water Deliveries to Everglades National Park <sup>1,2</sup>		○○○○○	—	—	●○○○○	○○○○●										
Herbert Hoover Dike <sup>1</sup>		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Restoration Strategies <sup>1</sup>		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tamiami Trail Next Steps Phase 1 <sup>1</sup>		●●●●●	●	—	—	—	—	—	—	—	—	—	—	—	—	—
Tamiami Trail Next Steps Phase 2 <sup>1</sup>		—	—	●●●●●	●●●●●	●	—	—	—	—	—	—	—	—	—	—
Kissimmee River Restoration Construction (Contracts 2B2, 10, 12a)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kissimmee River Restoration Monitoring		—	—	—	—	—	—	●△△△△	△△△△△	△△△△△	△△△△△	△△△△△	●○○○○			
West Palm Beach Canal/STA-1E		●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-111 South Dade Construction <sup>2</sup>		●	—	—	—	—	—	●○○○○	○○○○●							
C-111 South Dade PACR		●XXXXX		XXXXXX		XXXXXX	●●●●●	●●●●●	●●●●●	●●●●●						
Picayune Strand Restoration	OPE															
Faka Union Pump Station		●○○○○○	○○○○○	○○○○○	●											
Miller Pump Station		—	—	—	●○○	○○○○○	●									
Flood Protection Features		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Road removal		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canal plugging		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Indian River Lagoon-South																
C-44 Reservoir	B	●	—	—	—	—	—	●○○○○○	○○○○○	●						
C-44 STA & Pump Station	B	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-23/24 Reservoir North	UUP1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-23/24 Reservoir South	UUP1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-23/24 STA	UUP1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-25 Reservoir	UUP2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-25 STA	UUP2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Decomp Physical Model	QQP1	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
Caloosahatchee River (C-43) West Basin Storage																
Pump Station and Reservoir	D	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broward County Water Preserve Areas																
Mitigation Area A Berm	Q	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-11 Impoundment	Q	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WCA 3A & 3B Seepage Management	O	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-9 Impoundment <sup>3</sup>	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Biscayne Bay Coastal Wetlands Phase 1	FFF, OPE															
L-31 East Flowway - Federal		●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
L-31 East Flowway - Non-Federal		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cutler Wetlands		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C-111 Spreader Canal Western Project (Requires PPA)	WW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Central Everglades Planning Project																
PPA South: Validation Report	AA, FF, H, QQ				●XXXXX	XXXXXX	●●●●●									
Remove Old Tamiami Trail (ENP Preparing NEPA)		●XXXXX	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
L-67A Structure 1 & Gap in L-67C Levee		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Increase S-356		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
L-29 Gated Spillway		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Increase S-333 (S333N)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
L-67A Structures 2 & 3		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removal L-67C & L-67 Ext, Constr L-67D Levee		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removal L-29 Levee & Backfill L-67 Ext		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
PPA North	QQ, II				●XXXXX	XXXXX	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
PPA New Water (Seepage Barrier Only) <sup>3</sup>	V							●XXXXX	XXXXX	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
Loxahatchee River Watershed Restoration Project	X, Y, K	●XXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	●									
Lake Okeechobee Watershed Restoration Project	A, GG	●XXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	●									
Western Everglades Restoration Project	CCC	●XXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	●									
EAA Storage Reservoir (\$64M/yr in State funding)	G	●XXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	●									
ASR/Decomp Phase 2	GG, QQ							●XXXXX	XXXXXX	XXXXXX	●					
C-111 Spreader Canal Eastern	WW, FFF							●XXXXX	XXXXXX	XXXXXX	●					
BBCW Phase 2	FFF							●XXXXX	XXXXXX	XXXXXX	●					
Lake Okeechobee Regulation Schedule Revision <sup>1</sup>					●○○○○	○○○○○	○○○○○	○○○○○	○○○○○	○○○○○	●					
++ Does not reflect budgetary development dollars or capability	XXXX●	Project Implementation Report with Approved Waiver														
Blue = Non-Federal	XXXX●	Project Implementation Report														
Black = Federal	●●●●●	Design, PPA Execution, Real Estate Acquisition														
	●●●●●	Construction														
	○○○○○	Operational Testing and Monitoring Period														
	○○○○○	Fiscal Closeout														
	△△△△△	Monitoring														
	○○○○○	Operational Plan														
	W	Expected WRDA year														





# WORLD'S LARGEST AQUATIC ECOSYSTEM RESORATION PROGRAM

## SFER KEY ACCOMPLISHMENTS SINCE DECEMBER 2016

- **Modified Water Deliveries to Everglades National Park:** Physical construction complete.
- **Herbert Hoover Dike:** Over \$1 billion invested for public safety (includes \$50M from the State of Florida). The State will provide an additional \$50M in 2018.
- **Seminole Big Cypress:** Physical construction complete and features turned over to the Seminole Tribe of Florida for OMRR&R (cost-shared with Corps).
- **Tamiami Trail Next Steps Phase 1:** Construction completed ahead of schedule.
- **Kissimmee River:** Two final construction contracts ongoing.
- **C-111 South Dade:** Critical construction features completed 30 June 2018.
- **CERP Picayune Strand:** Construction complete for Faka Union Pump Station; transferred to SFWMD for OMRR&R (cost-shared with Corps).
- **CERP Site 1 Impoundment Phase 1:** Construction complete; features transferred to SFWMD for OMRR&R (cost-shared with Corps).
- **CERP Broward County Water Preserve Areas:** Project Partnership Agreement (PPA) executed; initiate construction of the Mitigation Area A Berm.
- **CERP Biscayne Bay Coastal Wetlands:** PPA executed; construction completed for culverts on the L-31 East Flow-way and features transferred to SFWMD for OMRR&R (cost-shared with Corps).
- **CERP Central Everglades Planning Project:** Authorized in WRDA 2016; Validation Report initiated.
- **Initiate Project Implementation Report (PIR) on:** Loxahatchee River Watershed Restoration; Lake Okeechobee Watershed Restoration; Western Everglades Restoration.
- **State of Florida** completed Everglades Agricultural Area (EAA) Section 203 Report and submitted to Congress for authorization in WRDA 2018.

### Benefits and Implementation to Date Since FY2000

1 - Seminole Big Cypress	<b>Conveyance &amp; Treatment</b> <ul style="list-style-type: none"> <li>• Approximately 1,500 acres of wetlands restored in Basins 1, 2, and 4.</li> <li>• East conveyance system completed.</li> </ul>
2 - West Palm Beach Canal/Stormwater Treatment Area (STA)-1E	<b>Storage &amp; Treatment</b> <ul style="list-style-type: none"> <li>• 6,000 acres of storage and treatment.</li> </ul>
3 - Modified Water Deliveries to Everglades National Park	<b>Storage, Conveyance &amp; Seepage Management</b> <ul style="list-style-type: none"> <li>• Increment 1 of G-3273 and S-356 Pump Station Field Test began 15 October 2015.</li> <li>• G-3273 Relaxation and S-356 Pump Station under Increment 1, 1.1, and 1.2 and operations have increased the net flow of water into Northeast Shark River Slough in Everglades National Park.</li> </ul>
4 - Kissimmee River Restoration	<b>Conveyance</b> <ul style="list-style-type: none"> <li>• Continuous flow restored to 22 miles of the Kissimmee River.</li> <li>• The area of wetland vegetation in the Phase I area has surpassed the predicted 80% of flow area (up from 37% prior to restoration)</li> <li>• Aquatic wading bird population in restored river and flow region is more than five times greater than before restoration.</li> </ul>
5 - C-111 South Dade	<b>Storage &amp; Seepage Management</b> <ul style="list-style-type: none"> <li>• C-111 South Dade combined with Interim Operational Plan operations moved 70% of flow at S-176 into South Dade detention areas.</li> <li>• Hydroperiods in ENP are on average 60 days longer near detention areas.</li> </ul>
6 - Melaleuca Eradication	<b>Invasive Species Control</b> <ul style="list-style-type: none"> <li>• To date, there have been over 1,500 release events: 1,160 releases of air potato beetles (282,771 insects), 171 releases of water hyacinth plant hoppers (1,608,657 insects), 176 releases of Lygodium moths (1,481,139 insects), and 40 releases of Lygodium mites (741,928 insects). All agents are proving effective.</li> </ul>
7 - Site 1 Impoundment	<b>Seepage Management &amp; Storage</b> <ul style="list-style-type: none"> <li>• L-40 Levee Rehabilitation (Phase 1) provided approximately 16% reduction in seepage loss from Water Conservation Area 1.</li> </ul>
8 - Picayune Strand Restoration	<b>Conveyance</b> <ul style="list-style-type: none"> <li>• Approximately 20,000 acres restored with Prairie and Merritt Canal project phase.</li> <li>• Approximately 600 acres restored with Faka Union Canal project phase.</li> <li>• Manatee Refugia feature provides manatees a connection to the warm groundwater in the winter months.</li> </ul>
9 - Indian River Lagoon-South C-44 Reservoir & STA	<b>Storage &amp; Treatment</b> <ul style="list-style-type: none"> <li>• Intake canal completed to provide the water supply source for the reservoir.</li> </ul>
10 - C-111 Spreader Canal Western Project	<b>Conveyance &amp; Storage</b> <ul style="list-style-type: none"> <li>• State of Florida completed the majority of the project features to retain water flow in 590-acre Frog Pond Detention Area.</li> <li>• Early results indicate flow has increased by 25% into Taylor Slough.</li> </ul>
11 - Biscayne Bay Coastal Wetlands - Phase One	<b>Conveyance &amp; Distribution</b> <ul style="list-style-type: none"> <li>• State of Florida completed Deering Estate and portion of the L-31 East culverts that distribute freshwater flow to coastal wetlands.</li> <li>• Sawgrass has expanded eastward toward the bay near L-31 culverts, which indicates more consistent freshwater flows.</li> </ul>
12 - C-43 Western Basin Storage Reservoir	<b>Storage</b> <ul style="list-style-type: none"> <li>• Design and construction by SFWMD on phase 1 began in 2015.</li> <li>• Site has been used to test reservoir designs and store 14,000 acre-feet of water that would have entered the Caloosahatchee River Estuary.</li> </ul>
13 - Broward County Water Preserve Areas	<b>Storage &amp; Seepage Management</b> <ul style="list-style-type: none"> <li>• Design of C-11 Impoundment has started with completion scheduled for 2021.</li> </ul>
14 - Central Everglades Planning Project	<b>Storage, Treatment, Conveyance and Seepage Management</b> <ul style="list-style-type: none"> <li>• Project authorized in WRDA 2016.</li> <li>• CEPP South Validation Report for southern components initiated in October 2017.</li> <li>• Design of removal of old Tamiami Trail and increase in S-333N structure initiated.</li> </ul>



### Adaptive Operations of the System

**Herbert Hoover Dike:** Public safety is the first priority. Over \$1B invested to date including \$50M from the State of Florida. \$514M received in Supplemental funds and an additional \$50M to be provided by the State of Florida. An additional \$162M is required in FY19 to complete the project by 2022. The Lake Okeechobee Regulation Schedule (LORS) update will sync with completion of HHD in 2022.

#### Lake Okeechobee Regulation Schedule

- Update to regulation schedule will sync with HHD Rehab completion.
- Operations manage water flow to estuaries, Everglades Agricultural Area, Everglades and Florida Bay.
- Dependent upon Flood Risk Management O&M Funding in FY19-FY22.

#### Combined Operational Plan

- Key to achieve benefits of the Modified Water Deliveries and C-111 South Dade Projects.
- Operations manage water flow from Water Conservation Area 3 to Everglades National Park and Florida Bay and reduce water loss to the east from Everglades National Park.
- COP is funded from: (1) C-111 South Dade Construction Project (36%); (2) Mod Waters Construction Project (39%); (3) SFER: C&S O&M Program (25%).

