INTEGRATED DELIVERY SCHEDULE: 2019 UPDATE

A restoration program snapshot through 2030

Eva B. Velez, P.E. Strategic Program Manager, Ecosystem Branch USACE Jacksonville District 29 October 2019

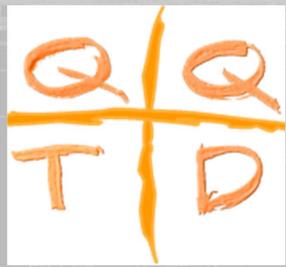














PURPOSE OF INTEGRATED DELIVERY SCHEDULE



Provides <u>schedule</u> and <u>sequencing plan</u> for achieving restoration benefits consistent with state and federal authorizations and funding

- Not an agency action or decision document
- Tool to provide information to decision-makers for scheduling, staffing, and budgeting
- Regular updates required in consultation with the South Florida Ecosystem Restoration Task Force and stakeholder input
- Living document, updated as needed to reflect progress and/or program changes
- Forward looking document a restoration program snapshot through 2030





HISTORY OF INTEGRATED DELIVERY SCHEDULE



Yellow Book (1999)

- Contained implementation plan with GANTT chart showing sequencing of CERP projects
- 35+ Year implementation period
- Coordinated with stakeholders prior to inclusion in Yellow Book
- Based on annual funding level of \$200M Federal and \$200M non-Federal

Master Implementation Sequencing Plan (MISP)

- Required by Programmatic Regulations for CERP
- To maximize the achievement of the goals and purposes of the plan at earliest possible time and in the most cost-effective way
- Completed in 2005, projects sequenced within 5-year bands
- Integrated foundation projects and other projects CERP depends upon to create an "Integrated Delivery Schedule" in 2008



INTEGRATED DELIVERY SCHEDULE: 2019



Working draft of IDS reviewed at Task Force sponsored public workshop on September 19, 2019.

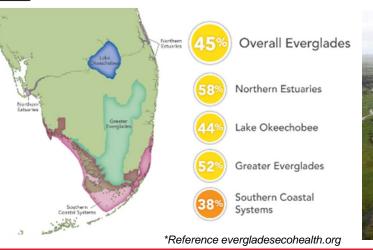
Video of meeting and summary available to the public on evergladesrestoration.gov



U.S.ARMY

BUILDING ON HISTORIC MOMENTUM







Key investments to date:

SFER INVESTMENT THRU FY2018 (Millions)										
	FEDERAL					NONFEDERAL				
							MULTIPLE		GRAND	
	ι	JSACE		DOI		TOTAL		AGENCIES		TOTAL
Mod Waters		77.5		317.3	\$	394.8			\$	394.8
Critical Projects		88.4		0	\$	88.4		88.7	\$	177.1
Kissimmee		377.5			\$	377.5		202.2	\$	579.7
C&SF Non-CERP	\$	771.8	\$	51.8	\$	823.6	\$	215.6	\$	1,039.2
C&SF CERP	\$	1,199.5	\$	112.5	\$	1,312.0	\$	1,667.0	\$	2,979.0
C&SF CERP, To be credited	\$	-	\$	-	\$	-	\$	712.0	\$	712.0
TOTAL SFER	\$	2,514.7	\$	481.6	\$	2,996.3	\$	2,885.5	\$	5,881.8
Restoration Strategies & ECP	\$	-	\$	-	\$	-	\$	1,627.8	\$	1,627.8
Herbert Hoover Dike	\$	1,023.0	\$	-	\$	1,023.0	\$	50.0	\$	1,073.0

Advancing construction and receiving ecosystem benefits is possible and achievable because several key non-CERP and foundation projects have reached important milestones through 2019 – Kissimmee River Restoration, COP, C-111 SD, Tamiami Trail Next Steps Phase 1, Modified Water Deliveries, and Restoration Strategies

IDS Planning level estimates for FY20 - FY30 (SFER authorized): Total \$6.133B

A healthy and resilient Everglades directly supports our economy and sustainability

Investments in SFER are one piece of the restoration puzzle

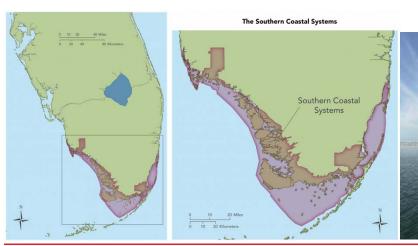




SOUTHERN COASTAL SYSTEMS REGION







Focus for FY20:

Design and Construction: Biscayne Bay Coastal Wetlands (BBCW) Phase 1 (L-31E flow way and Cutler Wetlands), Initiate Road Removal and construction of Southwest Protection Features at Picayune Strand Restoration Project

Operations: Complete Combined Operational Plan - Improved flows to Shark River Slough and Taylor Slough

Project Implementation Reports: Complete C-111 SD PACR, Initiate Biscayne Bay Coastal Wetlands Phase 2

FY19 Accomplishments:

Design and Construction: Awarded final construction contract on C-111 South Dade Project, Completed Operations & Testing phase for Picayune Strand Faka Union Pump Station, initiated design of Picayune Strand SW Protection Features, BBCW Phase 1 culverts and pump stations

Operations: Combined Operations Plan, BBCW Deering Estate nearshore habitat improvements, Improved flows to Shark River Slough and Taylor Slough

Project Implementation Report: Identified Tentatively Selected Plan for C-111 South Dade Post-Authorization Change Report (PACR)

IDS Planning level estimates for FY20 - FY30 (SFER authorized): \$106,098,000

- Connectivity of habitat for endangered species and to freshwater flows from the watershed
- Restore and sustain the highly productive estuaries and adjacent coastal wetlands by restoring freshwater flows to the extent practical
- Reestablishing more natural flows will restore estuarine salinity conditions, resulting in improved habitat for fish and wildlife resources
- Protection and sustainability of Everglades National Park



GREATER EVERGLADES REGION











Focus for FY20:

Design and Construction: Restoration Strategies, Decomp Physical Model, Broward County Water Preserve Area, Central Everglades Planning Project (CEPP) South (Old Tamiami Trail, Structures and Pump Station), CEPP New Water (EAA Stormwater treatment area and Reservoir, Seepage barrier and Canal conveyance improvements), Tamiami Trail Next Steps Phase 2

Operations: Combined Operations Plan

Project Implementation Reports: C-111 South Dade PACR

FY19 Accomplishments:

Design and Construction: Bridges across Tamiami Trail open, C-111 South Dade Project functionally complete, CEPP South - Old Tamiami Trail design and S-333N Construction

Operations: Combined Operations Plan, Flows across the Tamiami Trail 2.6 mile bridge for first time in 100 years, Improved flows to Shark River Slough and Taylor Slough, Record nesting season for wading birds in Water Conservation Areas

Project Implementation Reports: Identified Tentatively Selected Plan for C-111 SD PACR, CEPP South Validation Report, Congressional approval of CEPP EAA Reservoir and STA

IDS Planning level estimates for FY20 - FY30 (SFER authorized): \$4,298,000,000

- Improve the health of over 2.4 million acres of South Florida ecosystem, including Everglades National Park
- Improve ability to receive clean fresh water from the Northern Everglades
- Protection against salt water intrusion and resilience to sea level rise
- Improve water deliveries to Florida Bay and Biscayne Bay
- Improve water quality
- Enhance water supply and maintain flood protection for millions of residents



NORTHERN ESTUARIES REGION





Focus for FY20:

Design and Construction: Indian River Lagoon South C-44 Reservoir, Caloosahatchee River (C-43) Pump Station & Reservoir, Indian River Lagoon-South C-23/24 North Reservoir, C-23/C-24 South Reservoir, C-23/C-24 Stormwater Treatment Area, C-23/C-44 Interconnect

Operations: 2008 Lake Okeechobee Regulation Schedule (LORS), LORS deviation and System Operations Manual (LOSOM)

Project Implementation Reports: C-43 Post Authorization Change Report, Loxahatchee River Watershed Restoration Project Chiefs Report and anticipated authorization in WRDA 2020

FY19 Accomplishments:

Design and Construction: Design of C-23/24 North Reservoir, Construction of C-44 Intake Canal Bank Stabilization, continued construction of C-44 Reservoir Embankment, Start of dam construction at C-43 Reservoir

Operations: Additional operational flexibility in LORS facilitated favorable salinity conditions in CRE and SLE and some oyster and seagrass recovery

Project Implementation Reports: Tentatively Selected Plan and Environmental Impact Statement for Loxahatchee River Watershed Restoration Plan

IDS Planning level estimates for FY20 - FY30 (SFER authorized): \$1,571,600,000

- Restoration projects in the region aim to regulate freshwater inflows and establish beneficial salinity regimes by creating additional water storage and allowing greater flexibility in watershed and Lake Okeechobee operations.
- Restoration flows to the Loxahatchee River, a federally designated Wild and Scenic River



LAKE OKEECHOBEE REGION









Focus for FY20:

Construction: Kissimmee River Restoration (KRR), Herbert Hoover Dike Rehabilitation (HHD)

Operations: 2008 Lake Okeechobee Regulation Schedule (LORS). LORS deviation and System Operations Manual (LOSOM)

Project Implementation Reports: Lake Okeechobee Watershed Restoration Project (LOWRP) Chief's report and anticipated WRDA 2020

FY19 Accomplishments:

KRR: Snail kite and wading bird use of restored portions of river, 22 miles of backfill complete, final construction contracts underway

HHD: 65% of the 32 culverts have been completed and 40% of the 56.6 miles of cutoff wall has been installed

LOWRP: completed draft PIR/EIS including reviews

LOSOM: initiated study including public process

Operations: Additional operational flexibility in LORS facilitated a 4X increase in acres of Submerged Aquatic Vegetation in Lake Okeechobee

IDS Planning level estimates for FY20 - FY30 (SFER authorized): \$158,133,000

- Increases habitat for flora and fauna in the upper and lower Kissimmee Basin
- Healthier Lake Okeechobee: the liquid heart of the Everglades that flows waters from a 3.5 million acre watershed
- Maintains protection of the citizens of Florida for flood risk
- More storage increases operational flexibility
- Balances water needs of the region



INTEGRATED DELIVERY SCHEDULE: 2019





The updated IDS reflects the priorities and current implementation plan for the SFER Program.

The Corps and SFWMD will continue to work through the detailed estimated project cost estimates to ensure a CERP 50/50 cost share balance is maintained.

The project lead agency may vary in order to maintain a CERP 50/50 cost share balance.

Land and Work-in-Kind credits will be applied to the sponsor's ledger (as appropriate) once a project is authorized and a Project Partnership Agreement (PPA) is executed.











A healthy and resilient Everglades directly supports our economy and sustainability

Over 8 million people thriving in a managed, living system that protects our wildlife, plants and natural landscapes

Ongoing feasibility studies for the remaining components of CERP are anticipated for congressional authorization in upcoming WRDAs. More projects yet to come...

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