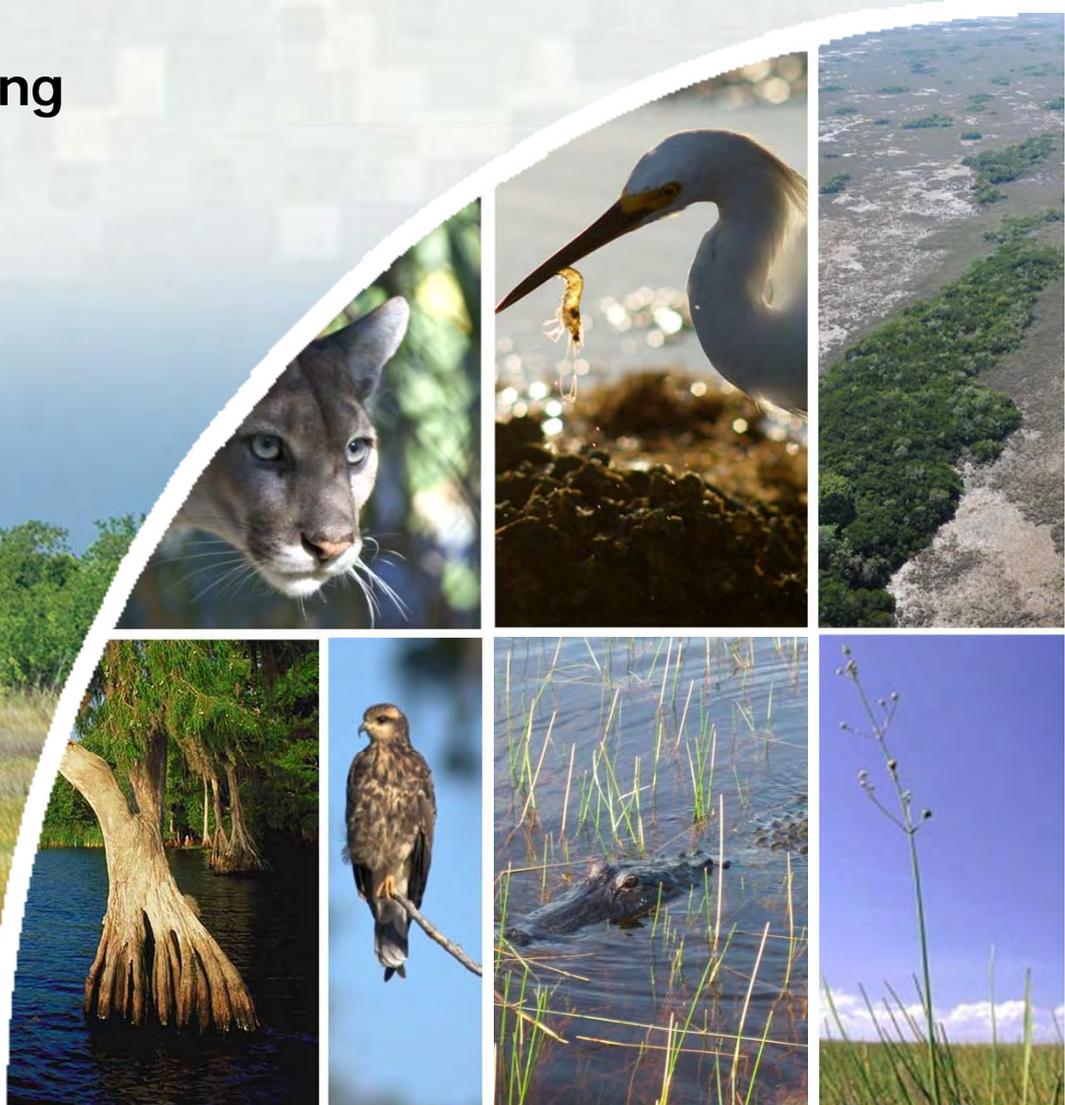


SOUTH FLORIDA ECOSYSTEM RESTORATION (SFER) PROGRAM

South Florida Ecosystem
Restoration Task Force Meeting
May 20, 2015

Howie Gonzales
Chief, Ecosystem Branch
USACE – Jacksonville District



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Purpose

The purpose of this briefing is to provide the South Florida Ecosystem Restoration Task Force with an overview update of the South Florida Ecosystem Restoration (SFER) program



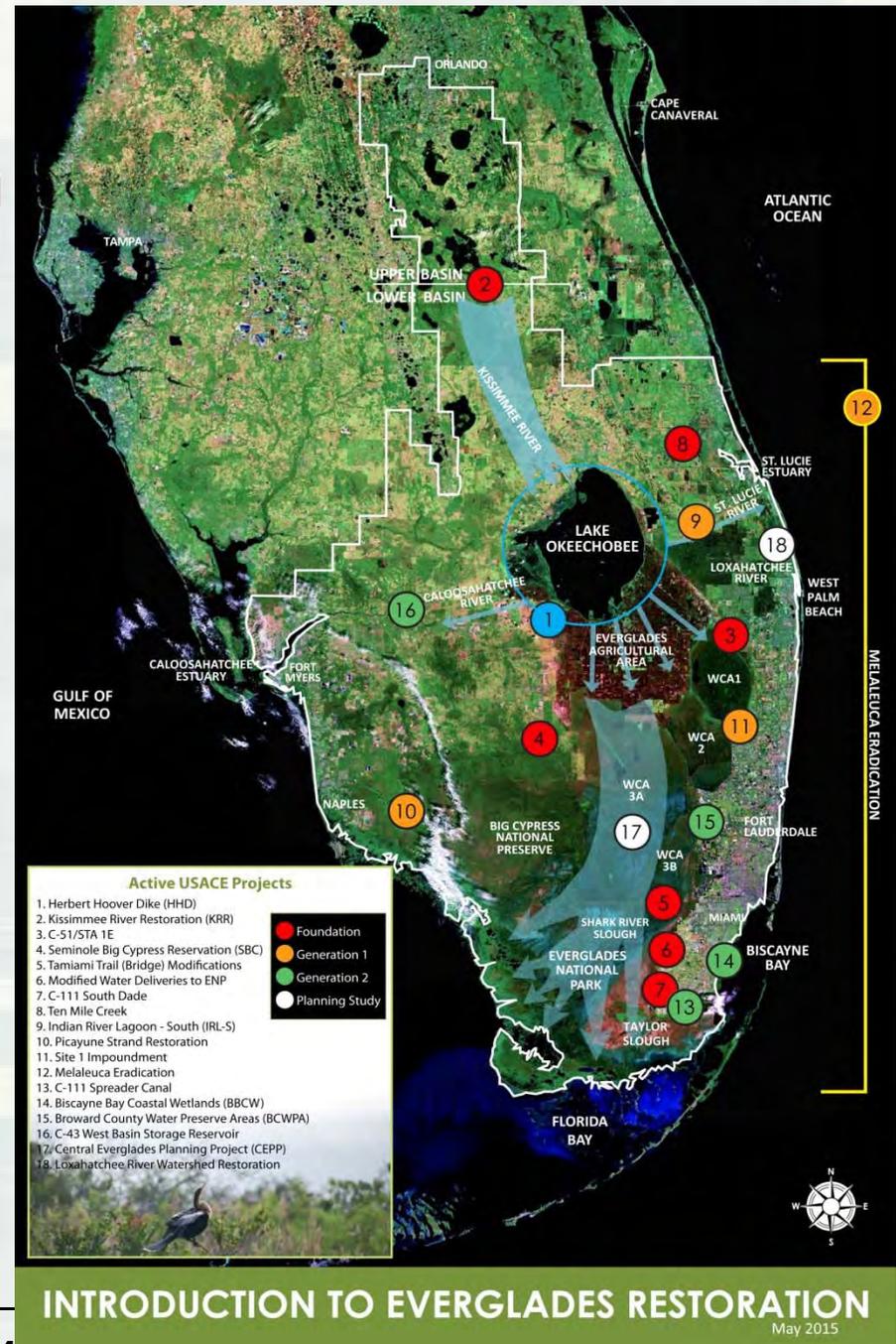
Agenda

- Overview
- Kissimmee River Restoration
- C-111 South Dade
- CERP: WRRDA 2014 authorized projects
- CERP: Central Everglades Planning Project (CEPP)
- Integrated Delivery Schedule (IDS)
- 2015 Report to Congress

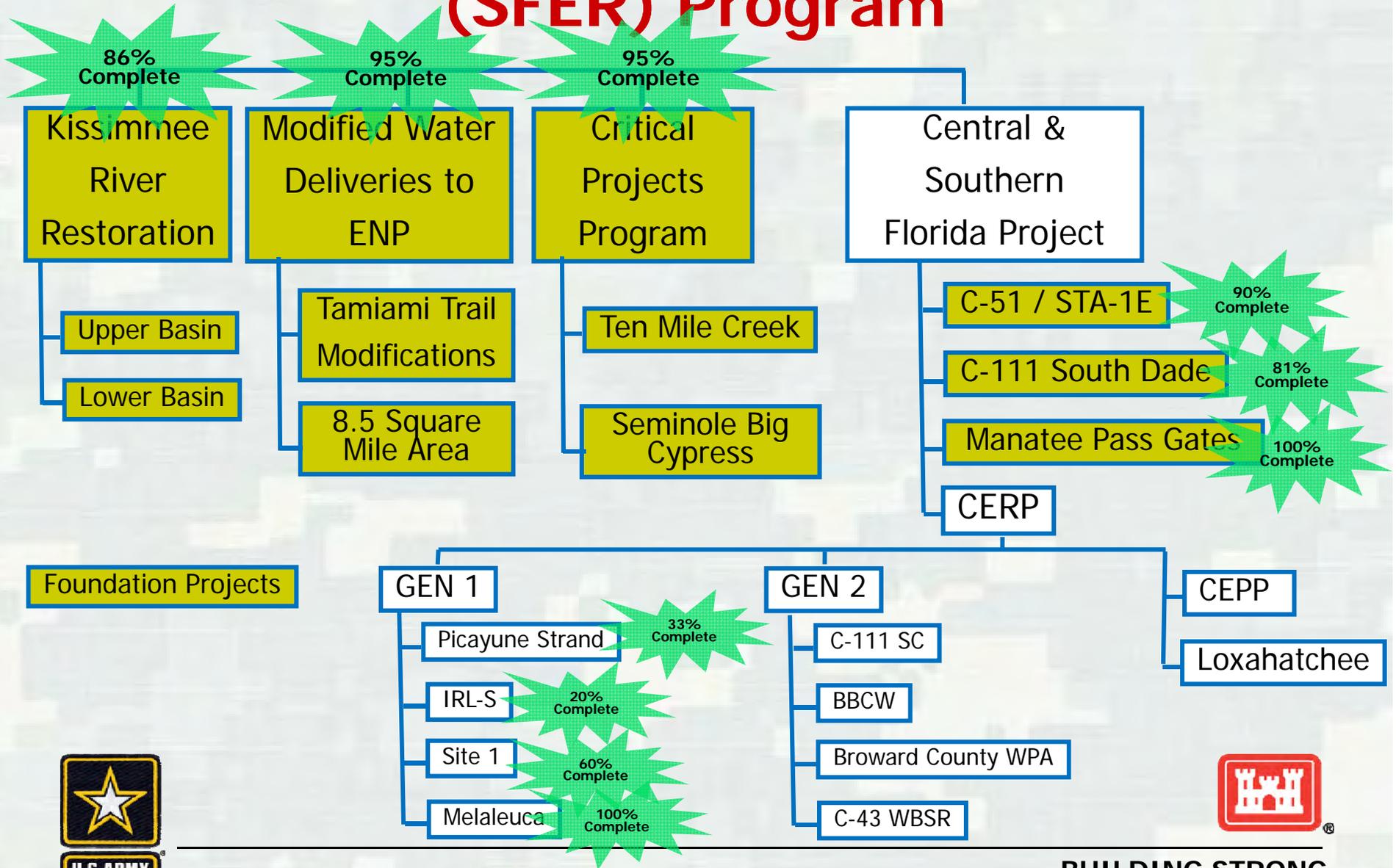


South Florida Ecosystem Restoration (SFER) Program

- Large-scale, watershed project area (over 18,000 square miles)
- Intense stakeholder interest
- Competing interests
- Complexity of problems
- Conflicting agency responsibilities



South Florida Ecosystem Restoration (SFER) Program





Foundation Projects

Kissimmee River Restoration

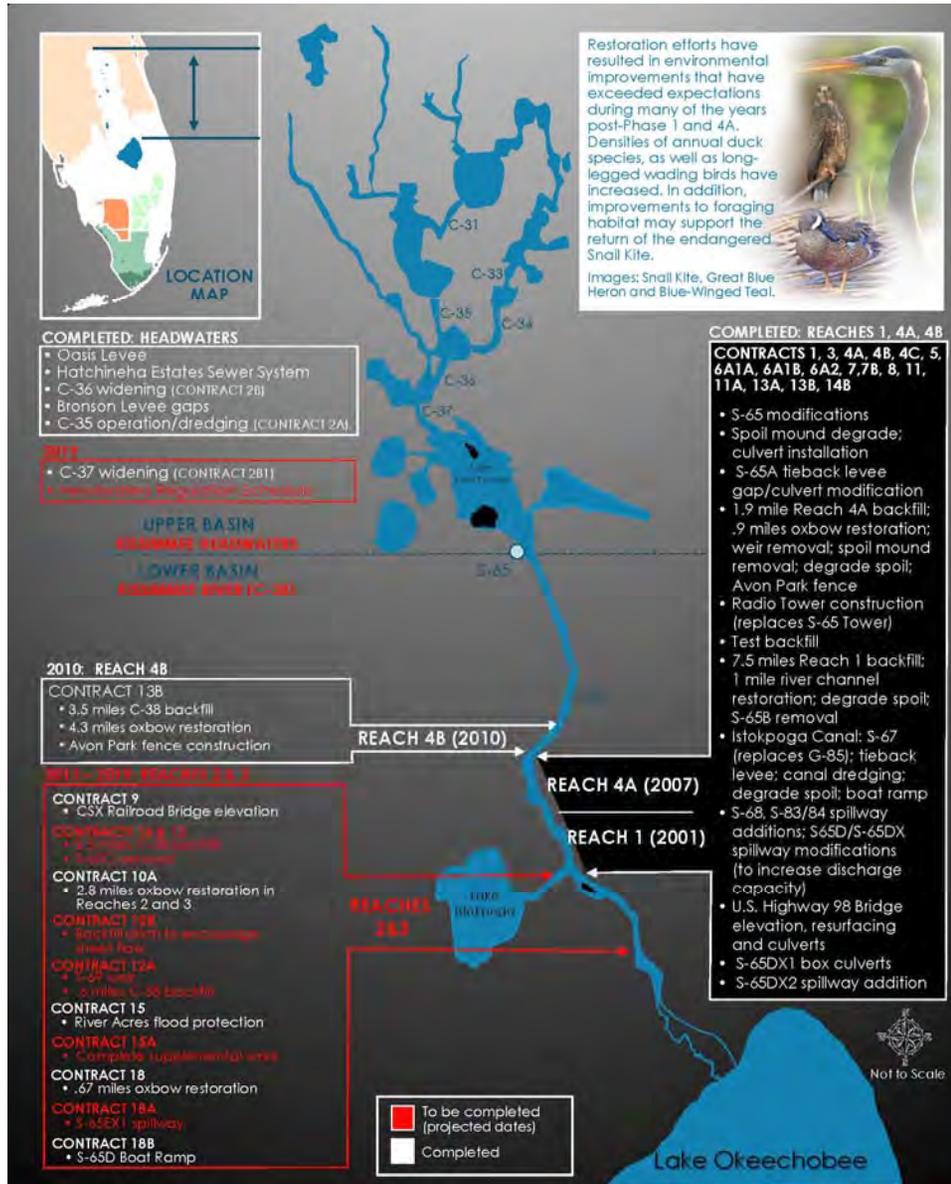
West Palm Beach Canal (C-51/STA-1E)

Seminole Big Cypress

Modified Water Deliveries to Everglades
National Park

C-111 South Dade

Kissimmee River Restoration (KRR)



Restoration of more than 40 sq. mi. of river-floodplain ecosystem

Remaining Project Efforts:

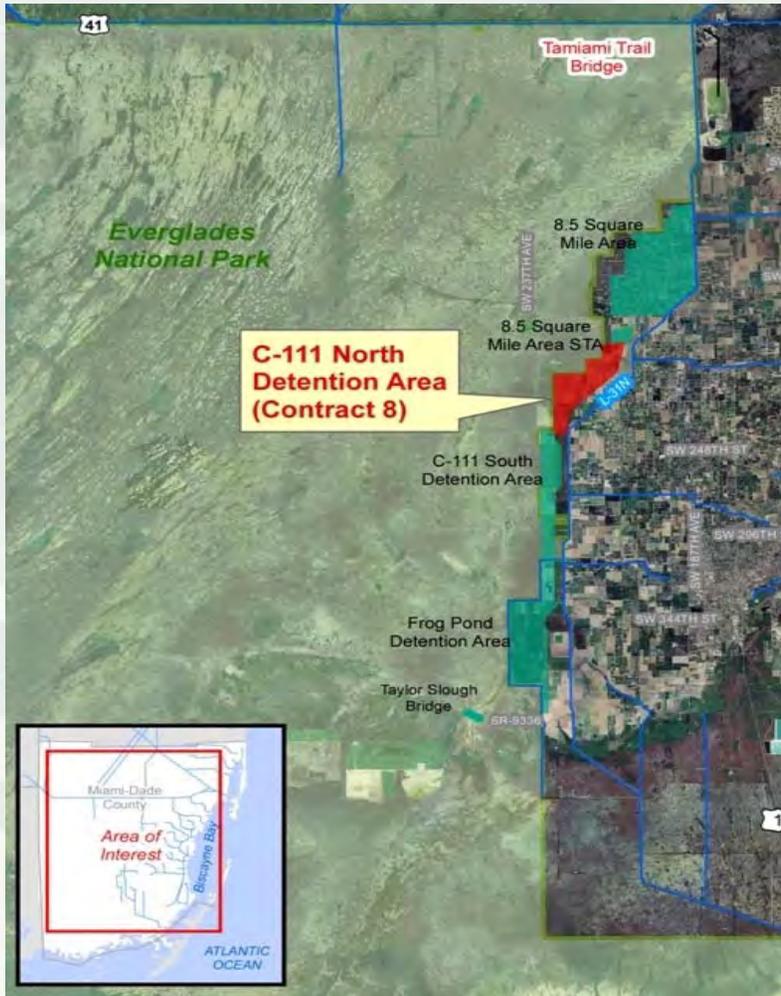
- Award Remaining Construction Contracts
 - Backfill 9 miles of the channelized Kissimmee River
 - Remove S-65C Lock and Spillway
 - Construct weir to redirect flows through the historic channel
- Complete Post Authorization Change Report
- Acquire additional real estate for project operations.

Path Forward:

- Complete construction by 2019;
- Implement Headwaters Regulation Schedule upon completion of all segments;
- Ecological Monitoring



C-111 South Dade



Status:

- 7 contracts complete
- 2 contracts pending:
 - Contract 8 - Northern Detention Area
 - Contract 9 - L-31W canal plugging
- Completion of Contract 8 is necessary to allow full operations of the Modified Water Deliveries project
- Schedule for Contract 8
 - PCA Amendment 1 Signed 14 Aug 14
 - Contract Award 31 Jul 15
 - Const Physically Complete 03 Jan 17





CERP Implementation

1st Generation

- Site 1 Impoundment
- Indian River Lagoon – South (IRL-S)
- Picayune Strand Restoration Project
- Melaleuca Eradication and Other Exotic Plants
- DECOMP Physical Model

2nd Generation = WRRDA 2014

- C-43 West Basin Storage Reservoir
- C-111 Spreader Canal Western Project
- Biscayne Bay Coastal Wetlands
- Broward County Water Preserve Area

Central Everglades Planning Project
Loxahatchee River Watershed Restoration

CERP: WRRDA 2014

C-43 West Basin Storage Reservoir

- Purpose = improve timing, quantity and quality of freshwater deliveries to Caloosahatchee River estuary
- FY16 PBUD = \$2.9M
- SFWMD will engage design and construction
- Construction initiation scheduled for 2015



CERP: WRRDA 2014

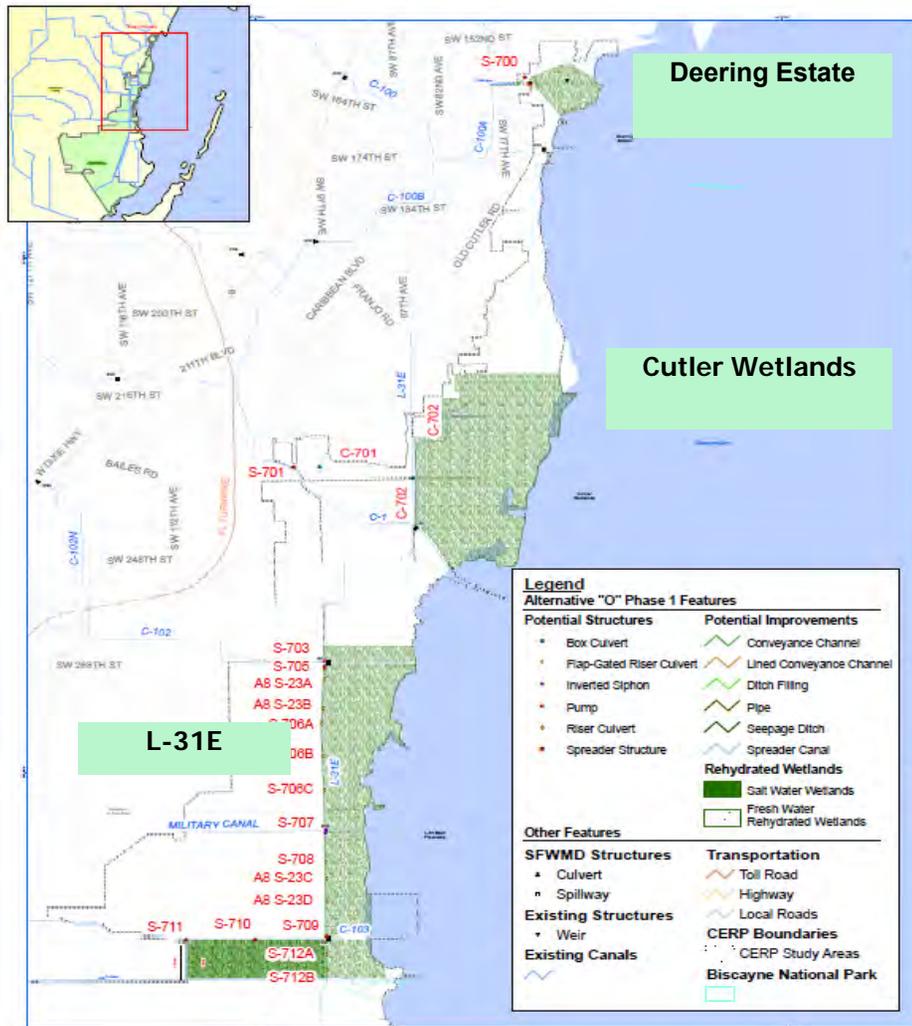
C-111 Spreader Canal



- Purpose = improve water deliveries to Florida Bay and to improve hydropatterns and hydroperiods in Southern Glades and Model Lands
- FY16 PBUD = \$100k
- SFWMD has completed construction of authorized plan
- Project Partnership Agreement execution in FY16



CERP: WRRDA 2014



Biscayne Bay Coastal Wetlands

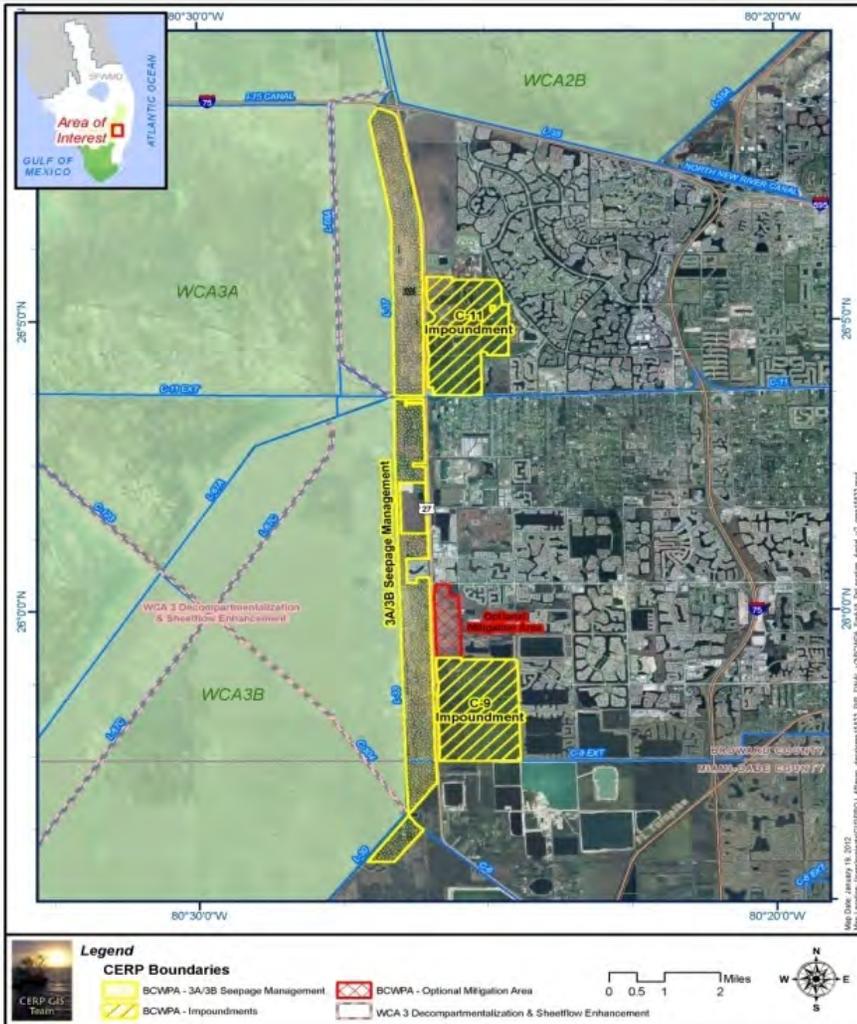
- Purpose = improve freshwater deliveries to Biscayne Bay
- FY16 PBUD = \$2.6M
- SFWMD has completed construction of portions of the authorized plan
- USACE will continue design of remaining components in FY16



CERP: WRRDA 2014

Broward County Water Preserve Area

- Purpose = reduce seepage, recharge groundwater, provide water supply, and prevent saltwater intrusion in western Broward County
- FY16 PBUD = \$2.9M
- USACE will engage design and construction
- USACE will continue design of remaining components in FY16



Central Everglades Planning Project (CEPP)

- Final Chief's Report signed December 2014
- Final Project Implementation Report (PIR) package undergoing review
 - Coordination with ASA(CW) and USACE Vertical Team ongoing
 - ASA(CW) review being finalized
 - Scheduled completion June 2015
- Office of Management & Budget (OMB) Review
 - Review will be conducted following ASA(CW) review
 - Scheduled completion July 2015
- Final Project Implementation Report (PIR) package approval and Record of Decision
 - Complete following OMB review
 - Provides for formal transmittal to Congress for authorization



Integrated Delivery Schedule (IDS)



Integrated Delivery Schedule (IDS)

- Purpose and need for Integrated Delivery Schedule (IDS)
- Strategy for updating IDS
- Guiding Principles
- Public Workshop Efforts
- Next Steps



IDS Purpose and History

- **Yellow Book (1999)**
 - Contained implementation plan with GANTT chart showing sequencing of CERP projects
 - Based on annual funding level of \$200M Federal and \$200M non-Federal
 - 35+ Year implementation period
 - Coordinated with stakeholders prior to inclusion in Yellow Book
- **Master Implementation Sequencing Plan (MISP)**
 - Required by Programmatic Regulations
 - 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



Development of IDS (1+ Year Effort)

- Multiple iterations of vision statements
- Resulted in development of Guiding Principles
- Multiple scenarios developed based on different themes
 - Sheetflow by 2020
 - Lake Okeechobee and Northern Estuaries
 - Optimizing Storage and Flexibility
 - “Finish What’s on our Plate”
 - Hybrid Approach – combined “Finish What’s on Our Plate” with common desire to pull projects such as Decomp forward
- Considered multiple cash-flow scenarios for each theme



Guiding Principles for the Integrated Delivery Schedule (IDS)

1. No CERP projects are being taken off the table; this re-evaluation is merely to update the project sequencing and develop a more realistic implementation schedule for the initial set of CERP projects to be constructed.
2. The Integrated Delivery Schedule acknowledges the Federal and State agencies commitment to complete the implementation of key ongoing projects. The term "commitment" refers to projects currently authorized, under construction or both. It includes the "Foundation Projects" (i.e. Modified Water Deliveries to ENP, Kissimmee River Restoration, C-111 South Dade, C-51/STA 1East, etc.) and other projects for which the Federal and State agencies have committed to accelerate implementation.
3. The IDS should include all projects related to the restoration of the Everglades. These projects include both State and Federal initiatives such as Herbert Hoover Dike Rehabilitation, the Northern Everglades Plan, and the Long-Term Plan for Achieving Water Quality Goals in the Everglades Protection Area.
4. The IDS Federal funding scenarios will only include those projects under the South Florida Everglades Ecosystem Restoration Program (SFEER). The SFEER projects include: MWD, Kissimmee, C&SF (includes C-111 SD, C-51, and CERP), and E&SF.
5. Projects should be implemented in a sequence that achieves restoration objectives at earliest practicable time, consistent with funding constraints.
6. As appropriate, projects should be broken into multiple Project Implementation Reports to facilitate the Incremental Adaptive Restoration (IAR) approach recommended by the National Academy of Science. Each separable element will conform to NEPA guidance, as well as other Federal and State laws.
7. The Integrated Delivery Schedule will provide the basis for the MISP update for CERP, as currently required by the Programmatic Regulations. The updated MISP, in turn, will be a major component of the wider-ranging IDS.
8. Project and component interdependencies will drive the sequencing order for constructing projects. (e.g., pilot projects must be completed prior to a full scale project.)
9. As appropriate, the Interim Goals and Targets should be used to measure restoration progress
10. Key points in implementation will be defined by new system operating manuals.

Guiding Principles

- Initial guiding principles developed by staff
- Guiding principles refined through the coordination, consultation and public engagement process during the development of the IDS
- Multiple Themes
 - Finish What is on our Plate
 - Hybrid Approach
 - Tiered Approach



Integrated Delivery Schedule (Federal Funding Scenario)

Projects	2009-2010	2011-2012	2013-2014	2015-2016	2017-2018	2019-2020	2021-2022
Foundation Projects	Manatee Pass Gates						
	Seminole Big Cypress						
	C-111 South Dade						
	C51/STA-1 East						
	Kissimmee River Restoration						
	Modified Water Deliveries to EHP						
Expedited CERP Projects	Picayune Strand Restoration						
	Site 1 Impoundment						
	IRL-South C-23/24 North Reservoir						
	IRL-South C-23/24 South Reservoir						
	IRL-South C-23/24 STA						
	Winsberg Farm Restoration						
	Broward County Water Preserve Areas						
	Biscayne Bay Coastal Wetlands						
	C-111 Spreader Canal Phase 1						
	C-43 West Reservoir						
	IRL South-C-44 Reservoir and STA						
EAA Reservoir Phase 1							
Other Authorized CERP Projects	IRL South-Allapatah						
	IRL South-North Fork Complex						
	IRL South-Palmar Complex						
	IRL South-Cypress Complex						
	IRL South-C-25 STA & Reservoir						
IRL South-Muck Remediation							

Notes: Construction Only – A Subset of the IDS
Does not include Herbert Hoover Dike

\$200 M

Hybrid Approach

Integrated Delivery Schedule (Federal Funding Scenario)

Projects	2011-2012	2013-2014	2015-2016	2017-2018	2019-2020	2021-2022
Expedited CERP Projects	IRL South-C-44 Reservoir and STA					
	EAA Reservoir Phase 1					
Other Authorized CERP Projects	IRL South-Allapatah					
	IRL South-North Fork Complex					
	IRL South-Palmar Complex					
	IRL South-Cypress Complex					
	IRL South-C-25 STA & Reservoir					
IRL South-Muck Remediation						
Other CERP Projects	ENP Seepage Management					
	Decomartmentalization Phase 1					
	Decomartmentalization Phase 2					
Lake Okeechobee Watershed						

Notes: Construction Only – A Subset of the IDS
Does not include Herbert Hoover Dike

\$300 M

Tiered Approach



Additional Information to Consider in this Update to IDS since 2011

- Status of Restoration Program
 - Restoration Strategies identified and construction underway
 - Construction of CERP Generation 1 projects underway
- WRRDA 2014 Authorization of Generation 2 projects
 - Broward County Water Preserve Areas
 - Biscayne Bay Coastal Wetlands
 - C-43 West Basin Storage Reservoir
 - C-111 Spreader Canal Western Project
- National Academy of Science 2014 Report to Congress
 - Committee on Independent Scientific Review of Everglades Restoration Progress (CISRERP)
- Central Everglades Planning Project (CEPP) planning phase complete
- Sea Level Rise
- 2014 CISREP Report



IDS Public Workshop Efforts



Draft IDS Worksheet

Project	Yellow Book Code	Fiscal Year															
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Federal Construction Cost			105	102	70	59	4	1	20	10	6	0	0	0	0	0	0
Non-Federal Construction Cost			66	90	45	2	2	1	1	1	1	0	0	0	0	0	0
Total Construction Cost			171	192	115	61	6	2	21	11	7	0	0	0	0	0	0
Modified Water Deliveries to Everglades National Park*																	
Herbert Hoover Dike*																	
Seminole Big Cypress*	OPE																
Restoration Strategies*																	
Tamiami Trail Next Steps Phase 1*																	
Kissimmee River Restoration																	
West Palm Beach Canal/STA-1E																	
C-111 South Dade																	
Picayune Strand Restoration	OPE																
Merritt Pump Station																	
Faka Union Pump Station																	
Manatee Mitigation and Flood Protection Features																	
Miller Pump Station																	
Remaining Features - Road removal and canal backfill																	
Site 1 Impoundment - Phase 1	M_P1																
Indian River Lagoon-South																	
C-44 Intake Canal	B																
C-44 Reservoir	B																
C-44 STA & Pump Station	B																
Decomp Physical Model	QQ_P1																
Caloosahatchee River (C-43) West Basin Storage Reservoir - Phase 1	D_P1																
Broward County Water Preserve Areas: C-11 Impoundment	Q																
Loxahatchee River Watershed Restoration Project	X, Y, K, GGG, OPE																



CERP Project List Example

Project Name	Yellow Book Code	Purpose	Areas of Benefit							
			Lower East Coast	Lake O	Loxahatchee	WCAs	ENP/ FI Bay	SLE	CE	Biscayne Bay
Big Cypress/L-28 Interceptor	CCC	Alleviates over drainage in Northeast Big Cypress, Kissimmee Billy and Mullet Slough area and ensure that inflows meet applicable water quality standards.				x				
Biscayne Bay Coastal Wetlands - Phase 2	FFF_P2	Redistributes freshwater flow and minimizes point source discharges by re-establishing connectivity between coastal and adjacent wetlands.								x
Biscayne Bay Coastal Wetlands Phase 1: Culter Wetlands	FFF_P1	Redistributes freshwater flow and minimizes point source discharges by re-establishing connectivity between coastal and adjacent wetlands.								x
Biscayne Bay Coastal Wetlands Phase 1: L-31 East Flowway	FFF_P1	Redistributes freshwater flow and minimizes point source discharges by re-establishing connectivity between coastal and adjacent wetlands.								x
Broward County Secondary Canal System	CC	Recharges wellfields in central and southern coastal Broward County, stabilizes the salt water interface and reduces storm water discharges to tide.	x							
C-111 Spreader Canal Eastern Project	WW	Reduces wet season flows in C-111, improve deliveries to Model Lands and Southern Glades and decreases potential flood risk in the lower south Miami-Dade area.					x			
C-111 Spreader Canal Western Project	WW	Reduces wet season flows in C-111, improve deliveries to Model Lands and Southern Glades and decrease potential flood risk in the lower south Miami-Dade area.					x			
C-4 Control Structure (Eastern)	T	Reduces regional system deliveries, increases recharge nearby in several coastal wellfields and control water levels in the C-4 Canal at higher elevation to reduce seepage losses from the Pennsuco Wetlands and areas to the west of the structure.				x	x			
C-43 West Basin Storage and ASR - Phase 2	D_P2	Captures basin runoff and releases from Lake Okeechobee, added water supply benefits, attenuates peak flow and provides environmental water supply deliveries to the Caloosahatchee estuary.		x						x
C-9 Stormwater Treatment Area/Impoundment	R	Provides treatment of runoff stored in North Lake Belt Storage Area, groundwater recharge within the basin and seepage control of WCA3 and buffer areas to the west.	x							
Caloosahatchee Backpumping with Stormwater Treatment	DDD	Captures excess C-43 Basin runoff to augment the regional system.								x
Central Everglades Planning Project - PPA New Water	G_P1, H_P1, V	Redirects damaging estuary discharges from Lake Okeechobee south to improve the flow, timing and distribution (QQTd) of water through and conditions within the Everglades.				x	x	x	x	
Central Everglades Planning Project - PPA North	H_P1, QQ_P1, II	Redirects damaging estuary discharges from Lake Okeechobee south to improve the flow, timing and distribution (QQTd) of water through and conditions within the Everglades.				x	x	x	x	



IDS Considerations for Scenario Development

- Project Dependencies
- Federal Process Assumptions
- Completed and Existing Projects and Plan Ahead
- Greater Everglades and Storage
- Focus on Storage
- Spatial Extent, Estuaries and Restore Flow South



IDS Next Steps

- With clarification provided at the 9 March workshop, staff will build sequencing plans based on process and design
- Maintaining target of IDS update completion in late 2015



2015 Report to Congress





Report to Congress - Requirement

- Update on CERP Implementation
- Required by Water Resources Development Act (WRDA) 2000 and the Programmatic Regulations
 - Jointly submitted by the Secretary of the Army and the Secretary of the Interior
 - In consultation with Environmental Protection Agency, Dept of Commerce, Seminole Tribe of Florida, Miccosukee Tribe of Indians of Florida, FDEP, SFWMD and other federal, state and local agencies; and the SFER Task Force
 - Submitted every five years

Report to Congress - Content

- Accomplishments during the past five years (2010 – mid 2015)
- Funds expended during period covered
 - Fiscal Years 2010 through 2014
- Progress on south Florida ecosystem restoration (science)
- Work anticipated over next five year period (2015 – 2020)
- Updated estimates of total cost of Plan and individual projects
- Expectations for south Florida ecosystem in next five years



Report to Congress – Projects

- Construction progress - ground breakings
- State early work, land acquisition and water reservations
- Pilot Projects
- Non-CERP project progress in support of CERP projects
- Authorizations for construction (WRRDA 2014)
- Completed Project Implementation Reports/Pilot Project Design Reports
- Master Agreement and executed Project Partnership Agreements
- Integrated Delivery Schedule coordination with South Florida Ecosystem Restoration

Report to Congress – Programs

- Science
 - Significant findings/New Science
 - National Academies biennial report findings
 - RECOVER* and Adaptive Management
 - Update on Climate Change
 - Invasive Species
- Programmatic
 - Project/Program funding
 - Expenditures through FY2014
 - Program Cost Update
 - Cost Share update
 - Public Outreach efforts

**RECOVER : REstoration COordination and VERification*



Report to Congress - Future

- Program Expectations
 - Construction
 - Project Implementation Reports
 - Authorizations
 - Other Restoration Efforts
- Land Needs
- Science
- Funding Needs

Report to Congress – Next Steps

- First Draft of Report for 30 day Review
 - Agency/Public review of draft 19 Jun
 - Consultation with Tribes 19 Jun
- **Final Draft of Report for Review 03 Aug**
 - OMB review 03 Aug – 01 Sep
 - Public review 03 Aug – 01 Sep
- **Deliver Final Report to Congress 30 Oct**



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