

South Florida Ecosystem Restoration

Integrated Delivery Schedule

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Presented by:

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US Army Corps of Engineers
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Overview of Briefing

- Purpose of IDS
- Background and Process to Update IDS
- Program Structure as it relates to IDS
- Stakeholder Input
- Current version of IDS
- Next Steps



Public Sequencing Plan Examples

Integrated Delivery Schedule Sequencing Plan Summary Sheet

Sequencing Plan Name: Establish a Unique and Descriptive Name of the Proposed Sequencing Plan.
Maximizing Ecological Benefits & Economic Return

Author of the Sequencing Plan: Identify the name of the Author(s) that developed the Sequencing Plan during the exercise and identify spokesperson if applicable.

Anticipated Benefits: Identify geographic, ecological, hydrological, and/or economic benefits of your sequencing plan.

This plan focuses on projects + the region to deliver widespread benefits from the Northern Estuaries Everglades and Biscayne National Park

Priorities for Concurrent Progress

Sequencing Plan: Identify projects in your recommended order of sequencing. (i.e. what projects show go below the black line on the Draft IDS Worksheet)

1. Planning & Design
 - EAA Reservoir Phase 1 & 2
 - BBCW Phase 1 & 2 (including 1A)
 - CIII Spreader remainder of West (198)
 - Remainder of IRL South
- 2.
- 3.
- 4.
5. Construction
 - Broward WPA
 - C43 (portion not funded)
 - CEPP (once authorized)
- 6.



Integrated Delivery Schedule Sequencing Plan Summary Sheet

Sequencing Plan Name: "Not Just Our Pet Pig": Northern Estuaries Protection and Everglades Benefits Sequencing Plan

Author of the Sequencing Plan: Identify the name of the Author(s) that developed the Sequencing Plan during the exercise and identify spokesperson if applicable.

Anticipated Benefits: Identify geographic, ecological, hydrological, and/or economic benefits of your sequencing plan.

Geographic: reaching an overarching goal for Everglades resiliency, sustainable wading bird population, provide water supply for agriculture, and ability to send water to the ENP.

The following is an excerpt from the IRL-S PIR which supports geographic benefits of our sequencing plan. Although through our familiarity with the IRL-S PIR, it should be noted that this type of information is available for all listed in our sequencing plan.

"Further, scientists have identified the large spatial extent of one of the defining physical characteristics of the pre-drainage south Florida wetlands, in combination with the complex multiple populations of plants and animals to thrive and persist in the pre-drainage area in south Florida made it possible for the support genetically viable numbers and sub-populations of species with large ranges and/or narrow habitat requirements; • provide the aquatic habitat for large numbers of higher vertebrate animals in a naturally nutrient rich environment; • sustain habitat diversity despite natural disturbances. The ability to recover from disturbances decreases as the available habitat diversity, the amount of seasonal refugia, and the number of species also decrease (USACE, 1999). In south Florida roughly 50 percent of the pre-drainage

Integrated Delivery Schedule Sequencing Plan Summary Sheet

Sequencing Plan Name: Establish a Unique and Descriptive Name of the Proposed Sequencing Plan. *Central Flow*

Author of the Sequencing Plan: Identify the name of the Author(s) that developed the Sequencing Plan during the exercise and identify spokesperson if applicable.

Anticipated Benefits: Identify geographic, ecological, hydrological, and/or economic benefits of your sequencing plan.

Focus on implementing CEPP as quickly as possible with:

- Additional storage to relieve N. Estuaries + benefit Central Zone + Southern Estuaries + gain flexibility to adapt to climate change
- Control seepage E of WATS ENP + WATS to enable higher stages in the Everglades
- Continue progress on BBCW, CIII Spreader, Decomp

Sequencing Plan: Identify projects in your recommended order of sequencing. (i.e. what projects show go below the black line on the Draft IDS Worksheet)

1. CEPP : @ South, North, New Water
2. Storage : @ HH benefits per reach (Interim LOS change)
3. @ Lake Okechobee Watershed
4. Seepage Mgmt : @ ENP Seepage management
5. To maximize ecological benefits : @ Complete CIIISW + BBCW Phase 2
6. @ Affix CEPP, complete remaining Decomp

Addressed from 1. Redundant : In finite L-28 interceptor project to address water quality



Theme 5 (Current Draft IDS)

Project	Yellow Book Code	Year																				
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Federal Construction Cost (SFER)		41	138	142	191	203	141	213	191	195	221	213	186	200	144	151	100	0	0	0	0	0
Non-Federal Construction Cost (SFER)		43	139	161	162	111	119	56	125	142	141	210	210	192	192	123	123	0	0	0	0	0
Total Construction Cost (SFER)		84	277	303	352	314	260	269	316	338	362	423	396	392	336	275	223	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 Contract 8 & 9		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
C-111 South Dade PACR		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Picayune Strand Restoration	OPE																					
Merritt Pump Station		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Faka Union Pump Station		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Manatee Mitigation and Flood Protection Features		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Miller Pump Station		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Remaining Features - Road removal & canal backfill		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Site 1 Impoundment	M																					
Phase 1																						
Indian River Lagoon-South																						
C-44 Intake Canal	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
C-44 Reservoir	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
C-44 STA & Pump Station	B	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
C-23/24 Reservoir North	B																					
C-23/24 Reservoir South	B																					
C-23/24 STA	B																					
C-25 Reservoir	B																					
C-25 STA	B																					
Natural Lands	B																					
Decomp Physical Model	Q	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Caloosahatchee River (C-43) West Basin Storage																						
Pump Station & Cell 1	D	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cell 2	D																					
Broward County Water Preserve Areas																						
C-11 Impoundment	Q	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
WCA 3A&3B Seepage Management	O																					
C-9 Impoundment	R																					
Biscayne Bay Coastal Wetlands Phase 1	FFF, OPE																					
L-31 East Flowway		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cutler Wetlands																						
C-111 Spreader Canal Western Project	WW																					
Central Everglades Planning Project (Authorization WRDA 2016)																						
PPA South: LRR & PPA Execution	AA, FF, H, QQ																					
Remove Old Tamiami Trail (CNTX)																						
L-67A Structure 1 & Gap in L-67C Levee (CNT 3)																						
Increase S-356 (CNT 4)																						
L-29 Gated Spillway (CNT 4b)																						
Increase S-333 (CNT 4a)																						
L-67A Structures 2 & 3 (CNT 5)																						
Removal L-67C & L-67 Ext, Constr L-67D Levee (CNT 6)																						
Removal L-29 Levee & Backfill L-67 Ext (CNT 7)																						
PPA North	QQ, II, G																					
PPA New Water	V																					
Loxahatchee River Watershed Restoration Project	X, Y, K	XXXXX	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lake Okeechobee Watershed, ASR		XXXXX	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Big Cypress/L-28 Interceptor (Western Everglades)		XXXXX	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
EAA Storage & ASR/Decomp Ph2																						
C-111 Spreader Canal Eastern & BBCW Ph2		XXXXX	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

XXXX SMART Planning Compliance Approval
 ● Planning
 ● Design, PPA Execution, Real Estate Acquisition
 ● Construction
 ● Operational Testing and Monitoring Period
 Foundation Projects
 Generation 1 Projects
 Generation 2 Projects
 Planning Phase - Not Authorized
 Blue = Non-Federal
 Black = Federal
 * Funded through other program authorities or by other entities

Theme 5 (Current Draft IDS):

- **Maximizes holistic benefits to regional system as early as possible**
 - ▶ Ensures continued stream of construction which provides for steady increase in regional ecosystem benefits
 - ▶ Provides benefits to Caloosahatchee & St Lucie estuaries from storage while infrastructure necessary to open up system for additional flow south is being implemented (CEPP south)
- **Ensures additional projects will be ready to continue progress on restoration**
 - ▶ Includes most of the planning efforts for projects identified by stakeholders as priorities
 - ▶ Prioritizes planning studies for LOW and the Western Everglades
- **Consistency with project dependencies and constraints**
 - ▶ Commitment to complete construction on projects where construction has been initiated
 - ▶ Consistent with project dependencies for moving water south
 - Modifications to downstream infrastructure, Restoration Strategies, etc.



Feedback Received on Theme 5

- General Reactions to Theme 5:
 - ▶ Shows good synergy of projects
 - ▶ Shows steady increase of benefits to the system
 - ▶ Consider adding District priorities to this list for a full picture
 - ▶ Engage the public to generate support for continued implementation of restoration projects
- Projects:
 - ▶ Consider looking at storage regionally/holistically
 - ▶ LOW and Western Everglades planning sequence well received
 - ▶ Look at moving components of BBCW forward, specifically Cutler Wetlands piece and planning for Phase II
 - ▶ Consider the ability to move up projects that are deemed critical
- Funding:
 - ▶ Maintain stable funding source for project implementation
 - ▶ If additional funding becomes available, move projects forward



Next Steps

- Schedule
 - ▶ Working Group Meeting – September 23, 2015
 - ▶ Task Force Meeting - November 19, 2015
 - ▶ Use IDS to guide our planning, design, and construction sequencing and budgeting

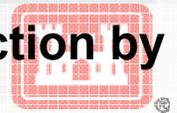


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Working Schedule

- Fiscal Year 2016
 - Continue temporary pumping at Pilot Project location
 - Complete and obtain Transfer Plan, Integral Determination Report and Project Partnership Agreement approvals
 - Design and Construct L-31E project culverts S- 712 A and S-712B
- Fiscal Year 2017
 - Continue temporary pumping at Pilot Project location
 - Design and Construct Pump Station S-709 and Culvert S-708
- Fiscal Year 2018
 - Design and Construct Pump Stations S-705 and S-703, and Culverts S-706A, S-706B and S-706C
 - Design and Construct Pump Stations S-710 and S-711, and North Canal Wetland Features including Spreader Canal south of C-103 Canal
- Fiscal Year 2019
 - Update design of the C-1 Cutler Flow Way project features

Working schedule affords an opportunity to complete project construction by 2022 but is dependent upon PPA execution and project funding





The End

