

South Florida Everglades Ecosystem Restoration Program

Restoration Program and Project Briefings

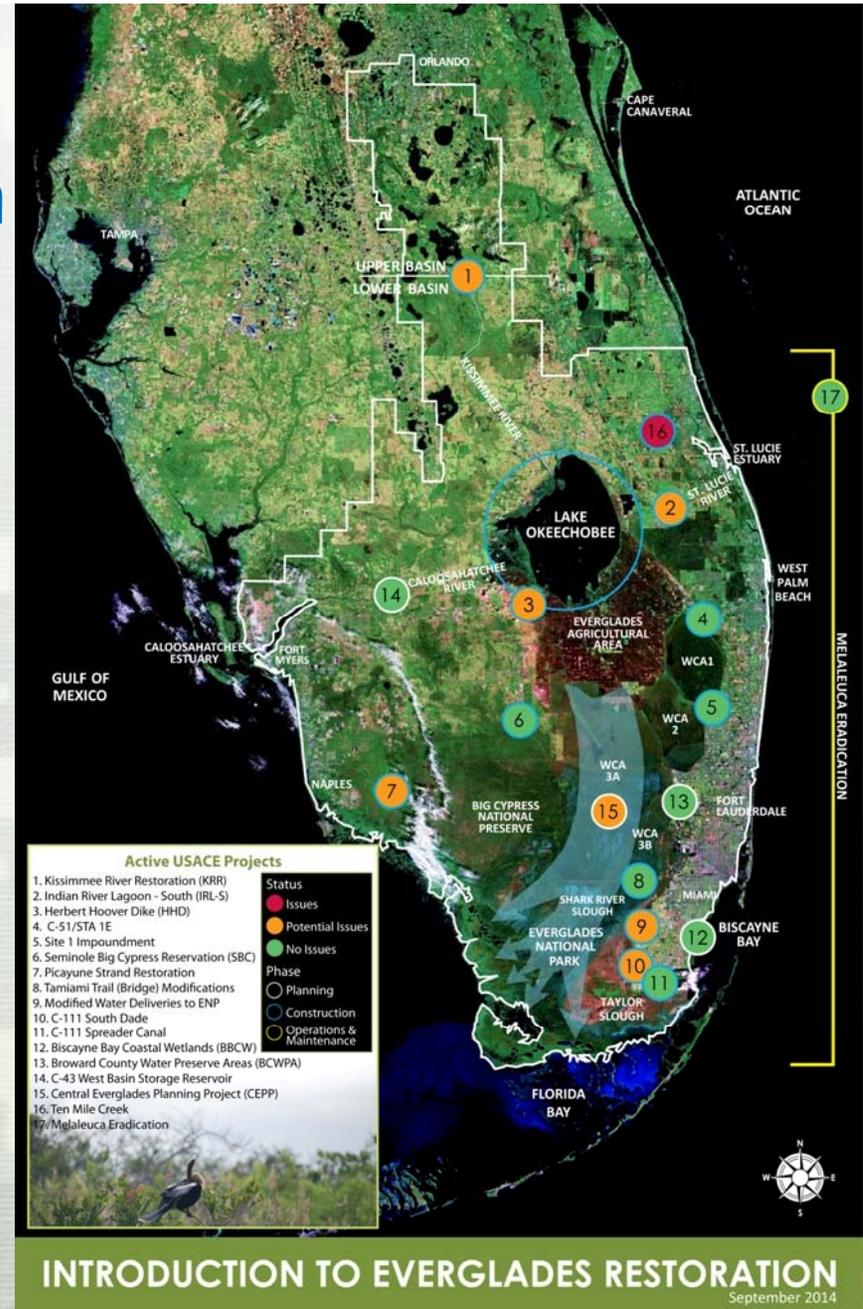
South Florida Ecosystem Restoration Task Force Meeting
November 19, 2014

Howie Gonzales
Chief, Ecosystem Branch
USACE – Jacksonville District



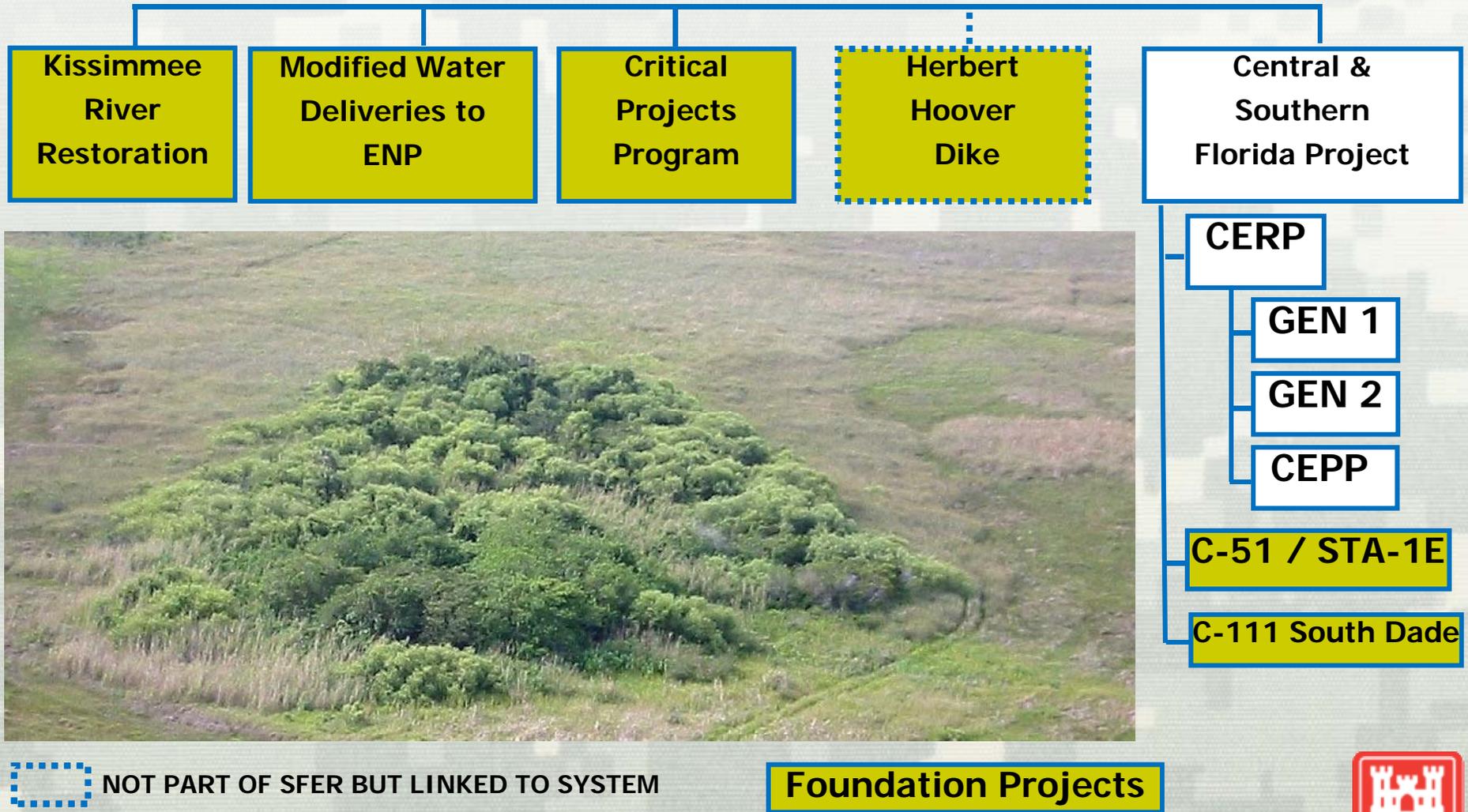
South Florida Ecosystem Restoration (SFER) Program

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



U.S. ARMY

SOUTH FLORIDA ECOSYSTEM RESTORATION PROGRAM



Foundation Projects

Kissimmee River Restoration

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

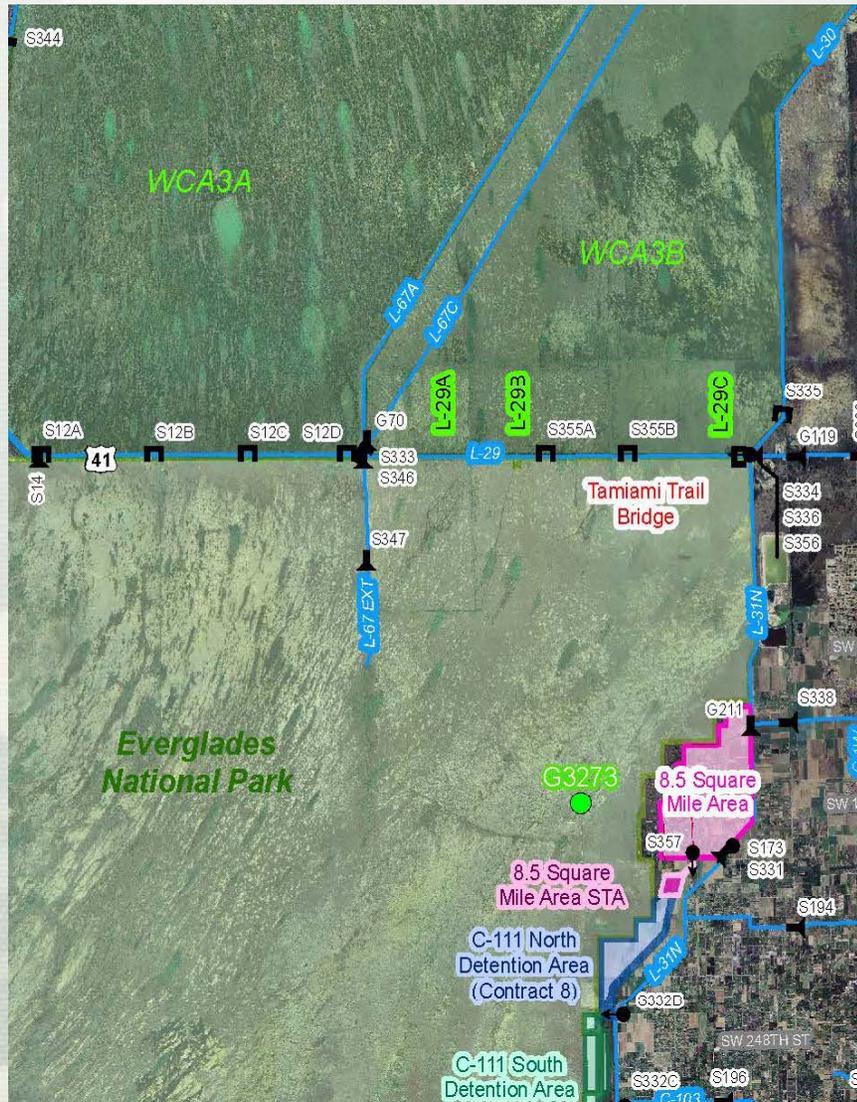
Seminole Big Cypress

**Modified Water Deliveries to
Everglades National Park**

C-111 South Dade



Modified Water Deliveries to ENP



Project Components/Status:

- Constructed S-355A & S-355B
- Raised Tigertail Camp
- Degraded the lower 4 miles of L-67 extension & levee
- Constructed temporary S-356 pump station
- Completing construction of 8.5 Square Mile Area flood mitigation features
- One-mile Tamiami Trail bridge constructed
- Initiating Operations Test of S-356/G-3273 – March 2015



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 17 Jul 15
 - Const Physically Complete 3 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

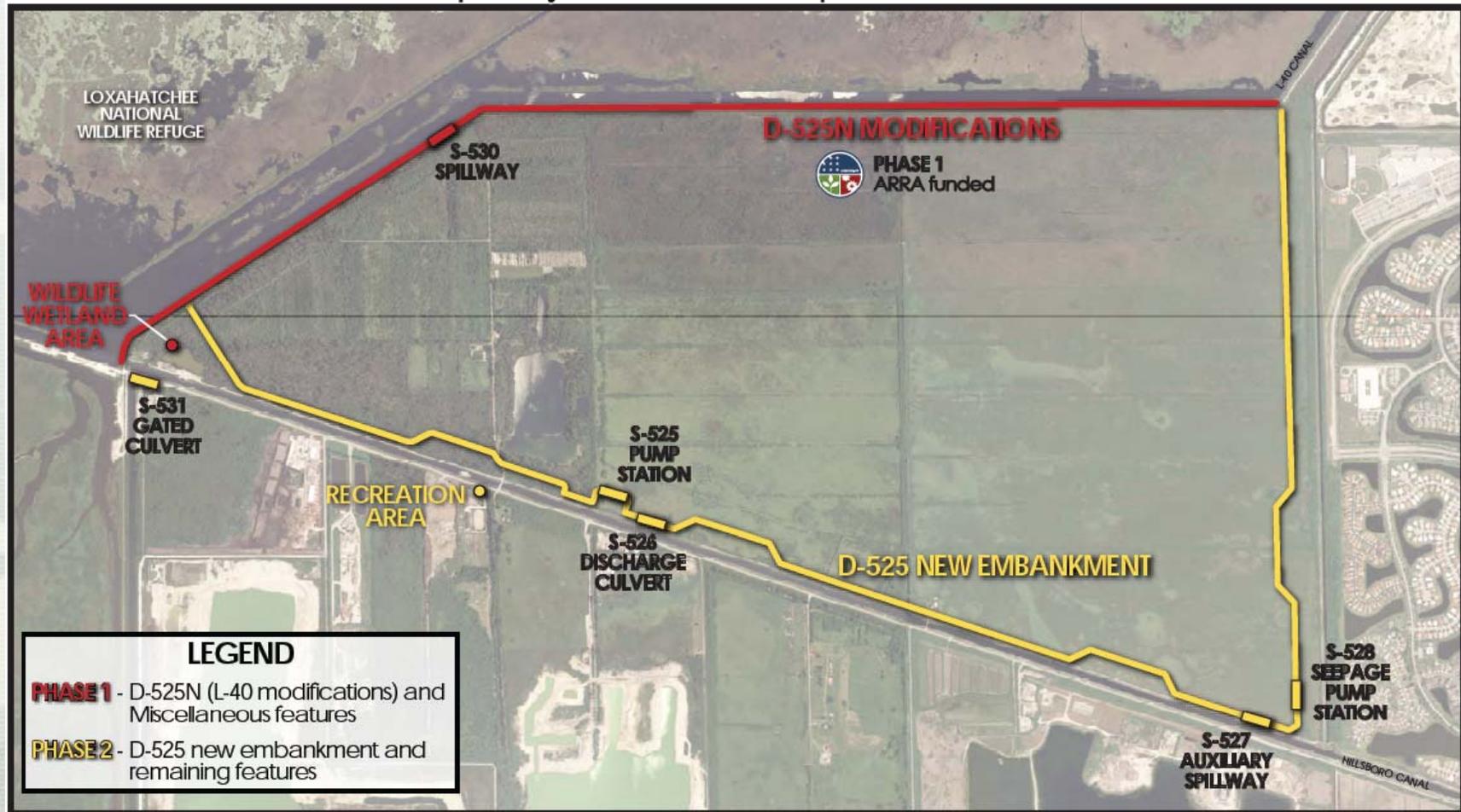
2nd Generation

- 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**



Site 1 Impoundment



Project Purpose: Improve water deliveries to Hillsboro Canal by capturing and storing water in above ground reservoir (13,280 acre-foot capacity)



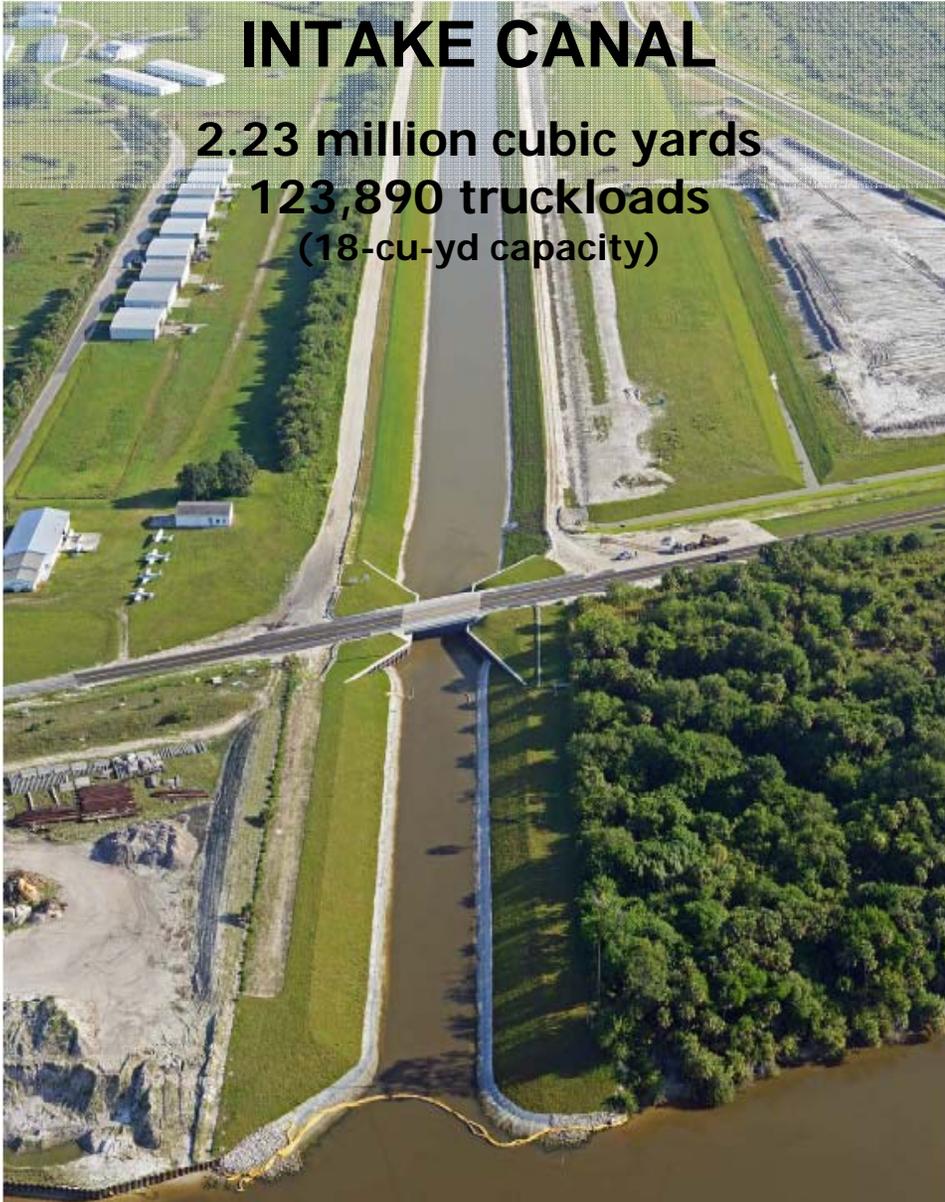
Site 1 Impoundment



- Phase 1: Construction initiated in FY2010 and reinitiated in FY2012
- Scheduled for completion in July 2015

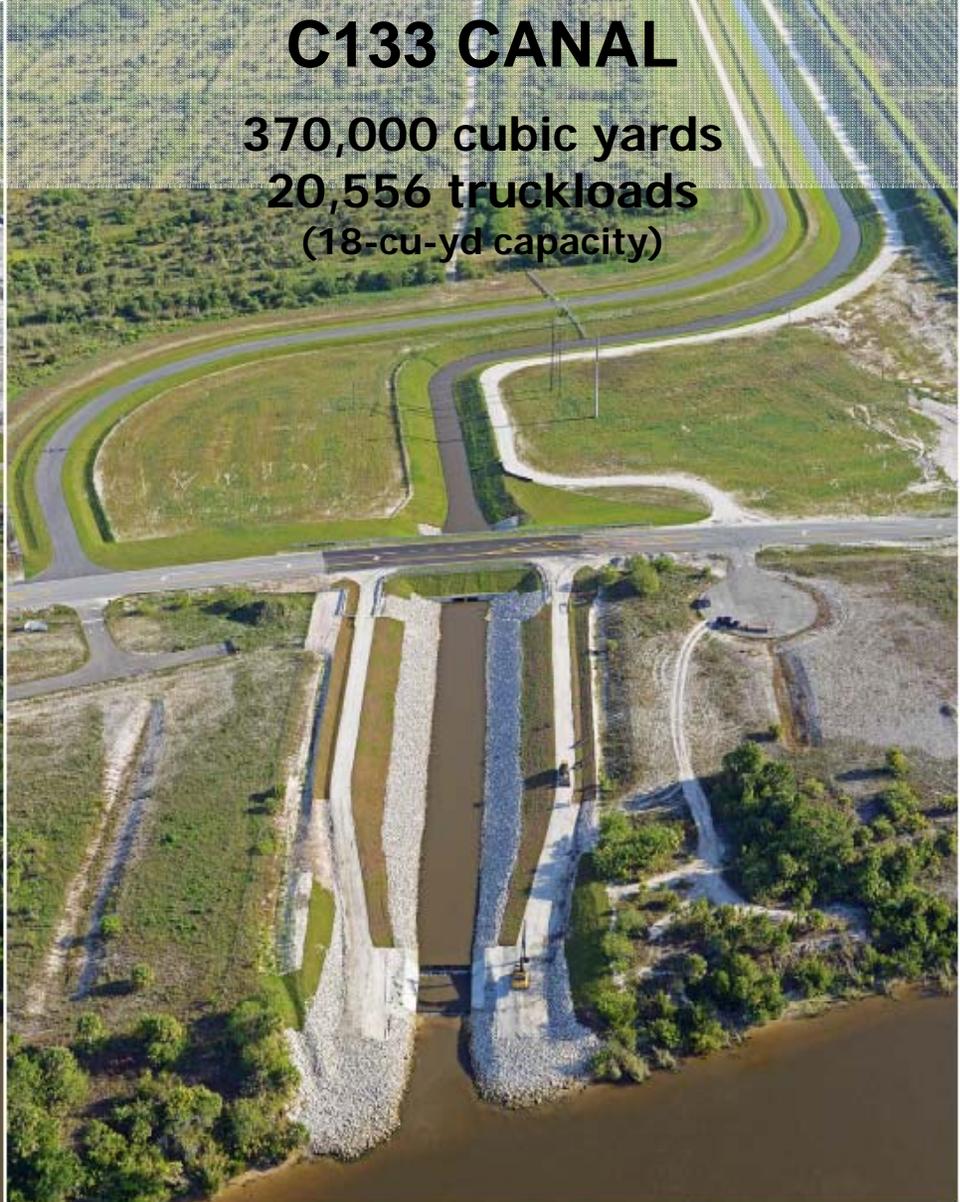


Indian River Lagoon – South (IRL-S): C-44 Reservoir/STA



INTAKE CANAL

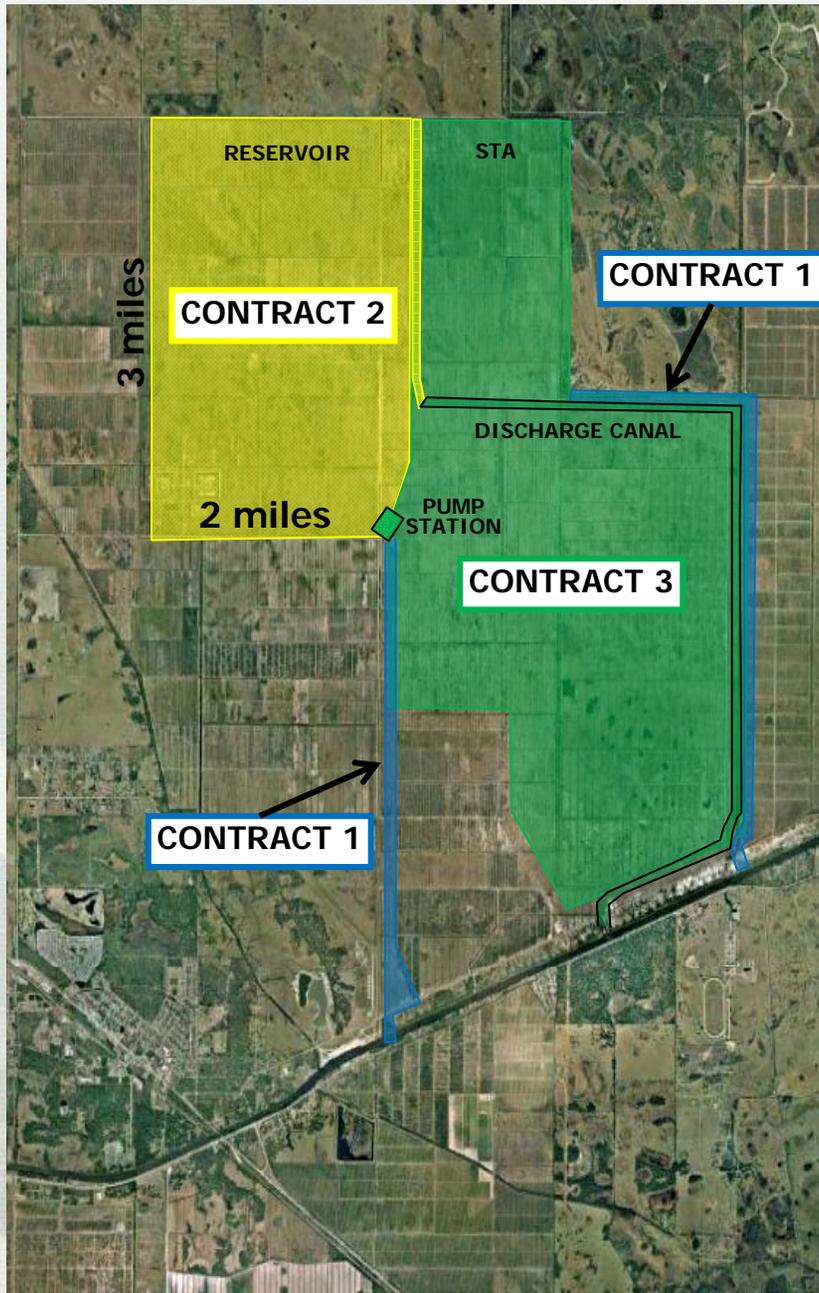
2.23 million cubic yards
123,890 truckloads
(18-cu-yd capacity)



C133 CANAL

370,000 cubic yards
20,556 truckloads
(18-cu-yd capacity)

Indian River Lagoon – South (IRL-S): C-44 Reservoir/STA



Purpose: Capture local run-off from the C-44 basin, reducing average annual total nutrient loads and improving salinity regimen for the St. Lucie Estuary and southern portion of the Indian River Lagoon.

Major Components:

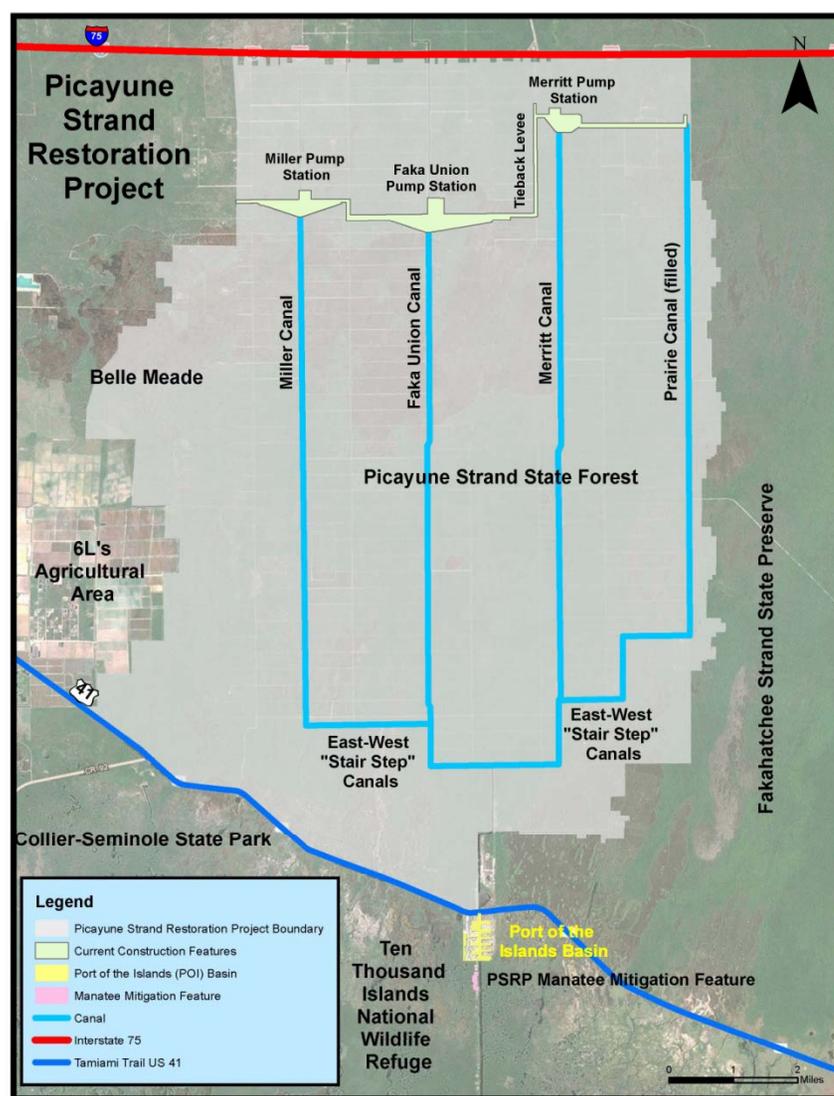
- Construction of intake canal and access roads
- Construction of above-ground reservoir
- Construction of storm-water treatment area

Schedule:

Contract	Award	Completion
CNT-1 (USACE)	JUL 11	Completed
CNT-2 (USACE)	JUN 15	SEP 19
CNT-3 (SFWMD)		
System Discharge	SEP 14	JUL 15
STA	OCT 14	JUL 17
Pump Station	MAY 15	OCT 17



Picayune Strand Restoration Project



PROJECT FEATURES

- Three pump stations: Merritt, Faka Union, and Miller
- Three spreader basins
- Plugging 48 miles of canals
- Removing and degrading 260 miles of crumbling roads
- Managing non-native vegetation
- Features to maintain current levels of flood protection (levees, canals and culverts)
- Features to mitigate effects of manatee refugium at the Port of the Islands Marina



Picayune Strand Restoration Project

Merritt Pump Station Features:

- 810-cubic feet per second (cfs) pump station, spreader basin, and tie-back levee **(Complete)**
- Plug 13.5 miles of canals to block flow **(Under Construction)**
- Remove and degrade 95 miles of roads and tram roads **(Complete)**

Faka Union Pump Stations Features:

- 2,650-cfs pump station, spreader basin, and tie-back levee **(Under Construction)**
- Plug 12 miles of canal to block flow **(Following Completion of Pump Station and contingent upon approved Limited Reevaluation Report (LRR) and Congressional authorization)**
- Remove 100 miles of roads **(Complete)**

Miller Pump Stations Features:

- 1,250-cfs pump station, spreader basin, and tie-back levee **(Under Construction)**
- Plug 13 miles of canal to block flow **(Following Completion of Pump Station and contingent upon approved Limited Reevaluation Report (LRR) and Congressional authorization)**
- Remove and degrade 65 miles of roads **(Under Construction with completion contingent upon approved Limited Reevaluation Report (LRR) and Congressional authorization)**



Melaleuca Eradication and Other Exotic Plants

- Joint USACE, Department of Agriculture (USDA), and South Florida Water Management District (SFWMD) effort
- Divided into two phases:
 - Construction of an annex to USDA Laboratory facility at Davies FL (Completed 2013)
 - 25 year “Raise, Release, and Monitor ” (RRM) operation to combat invasive non-native plants with biological control agents
- FY14 was first full year of RRM operations



DECOMP Physical Model



L-67A S-152 Structure

- ◆ 10-60" gated culverts
- ◆ Headwater: 5.90' to 11.50' (NAVD88)
- ◆ Tailwater: 4.5' to 8.80' (NAVD88)

L-67C Backfill/Levee Degrade

- ◆ 1000' Complete Backfill (marsh grade)
- ◆ 1000' Partial Backfill
- ◆ 1000' No Backfill
- ◆ 3000' Levee Degrade

Operation/Testing

- ◆ Completed 1ST Year
- ◆ 2ND year Nov'14-Jan'15
- ◆ Additional 3RD year FY16



2nd Generation CERP Projects



C-43 West Basin Storage Reservoir

- Purpose = improve timing, quantity and quality of freshwater deliveries to Caloosahatchee River estuary
- Record of Decision signed and report submitted to Congress on 13 Apr 11
- Authorized in WRRDA 2014

C-111 Spreader Canal

- Purpose = improve water deliveries to Florida Bay and to improve hydroperiods and hydroperiods in Southern Glades /Model Lands
- Record of Decision signed and report submitted to Congress on 19 Jul 12
- Authorized in WRRDA 2014



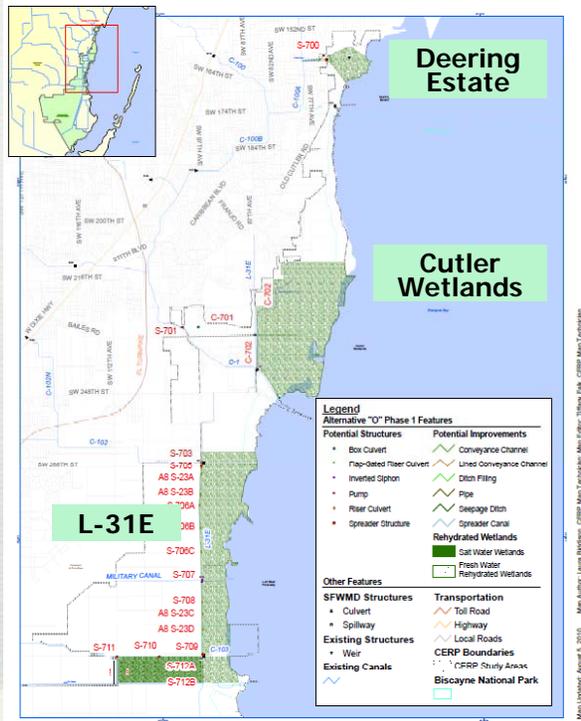
Frog Pond
Impoundment



2nd Generation CERP Projects

Biscayne Bay Coastal Wetlands

- Purpose = improve freshwater deliveries to Biscayne Bay
- Record of Decision signed and report submitted to Congress on 19 Sep 12
- Authorized in WRRDA 2014

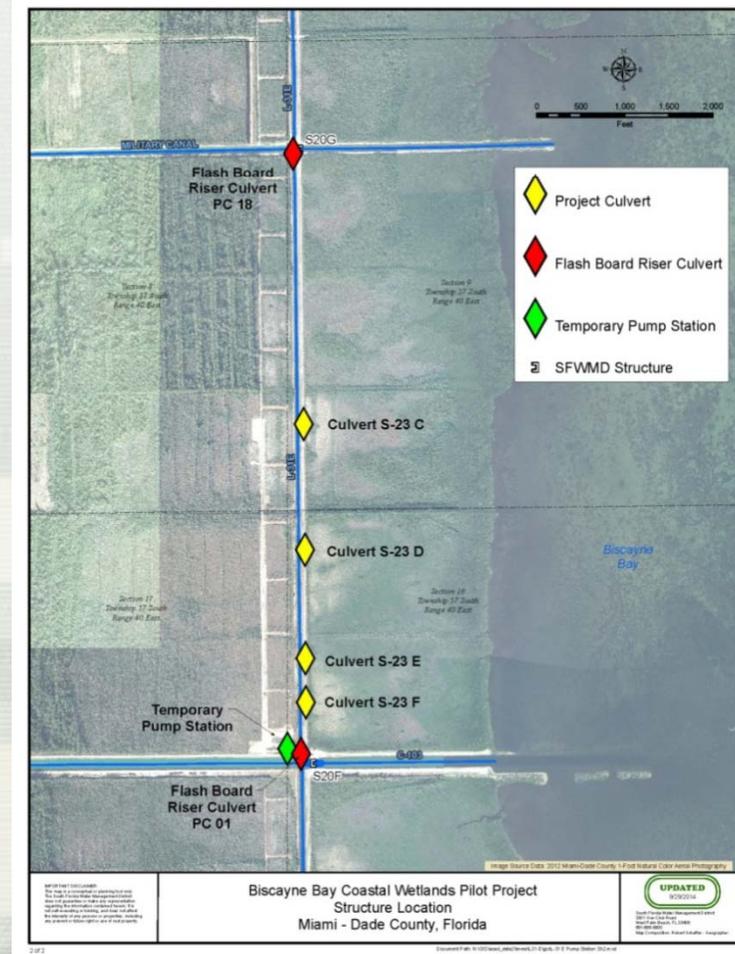
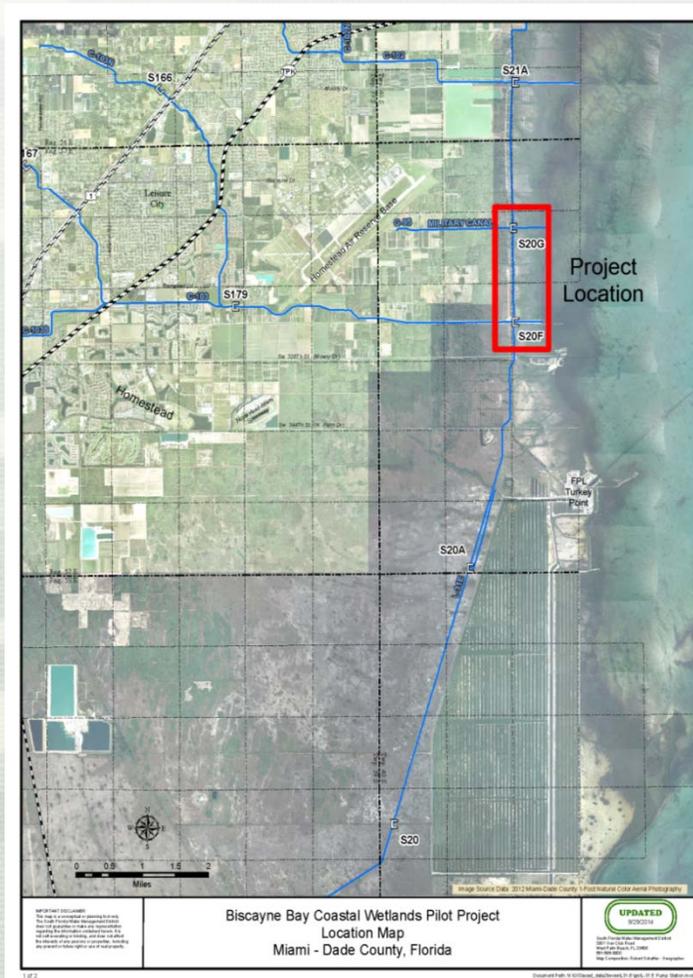


Broward County Water Preserve Area

- Purpose = reduce seepage, recharge groundwater, provide water supply, and prevent saltwater intrusion in western Broward County
- Record of Decision signed and report submitted to Congress on 25 Oct 12
- Authorized in WRRDA 2014



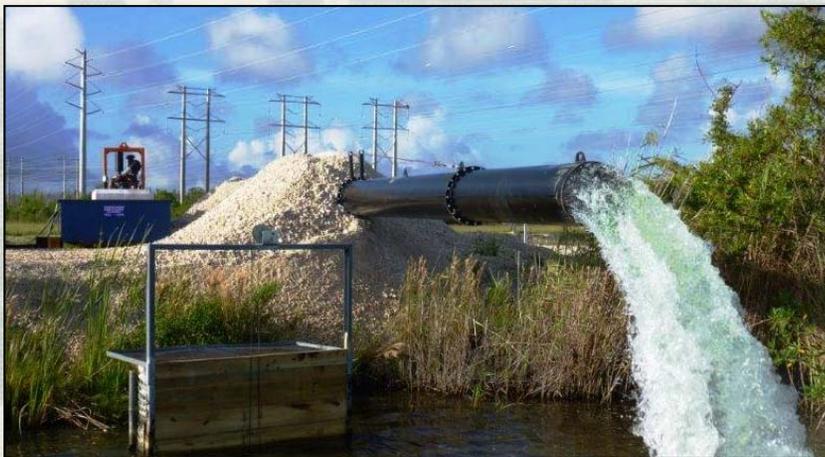
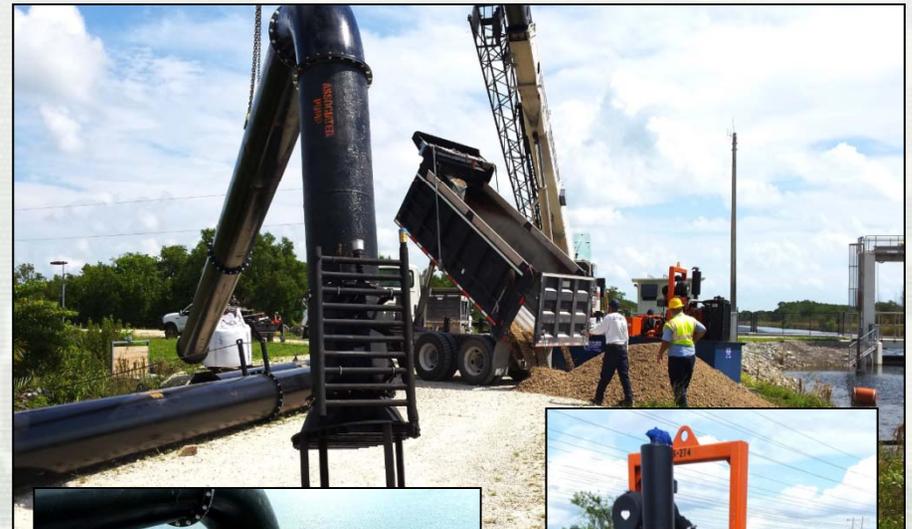
Biscayne Bay Coastal Wetlands (BBCW) Pilot Project Pump Test



- Pilot Test will divert water from point source discharge and redistribute it through culverts into remnant tidal creeks



Biscayne Bay Coastal Wetlands (BBCW) Pilot Project Pump Test



Central Everglades Planning Project (CEPP)

STATUS:

- **Final PIR/EIS and Draft Chief's Report**
 - State & Agency Review, public review initiated 8 August 2014
 - Comment Period closed 3 October 2014
 - Comments under review
 - Closing out Agency Response to Independent External Peer Review

- **Final Chief's Report**
 - Expected to be completed Dec/Jan timeframe
 - Will then be forwarded to Office of Management and Budget for review

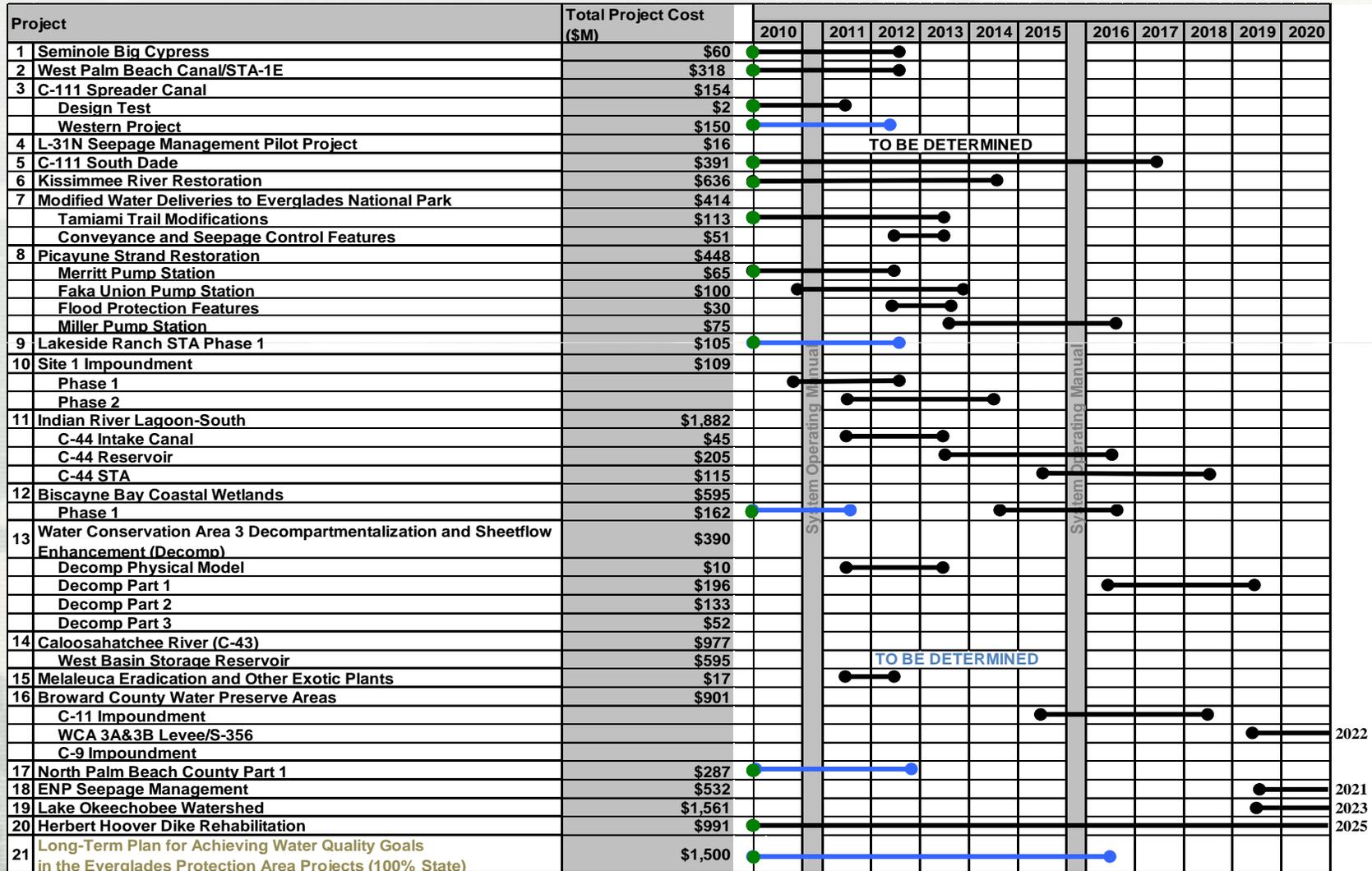


Integrated Delivery Schedule (IDS)

- Comprehensive sequencing and scheduling of construction projects in the South Florida ecosystem restoration program
- Incorporates both Federal and State initiatives
- Allows implementing agencies to provide guidance to decision-makers for scheduling, staffing, and budgeting
- Living document that will be updated to reflect major program changes



Integrated Delivery Schedule (IDS)



- Projects are currently federal construction.
- Projects are currently non-federal construction, subject to change based on further authorization and funding.
- Construction has started on these projects.

October 2010



South Florida Everglades Ecosystem Restoration Program

Questions?



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