



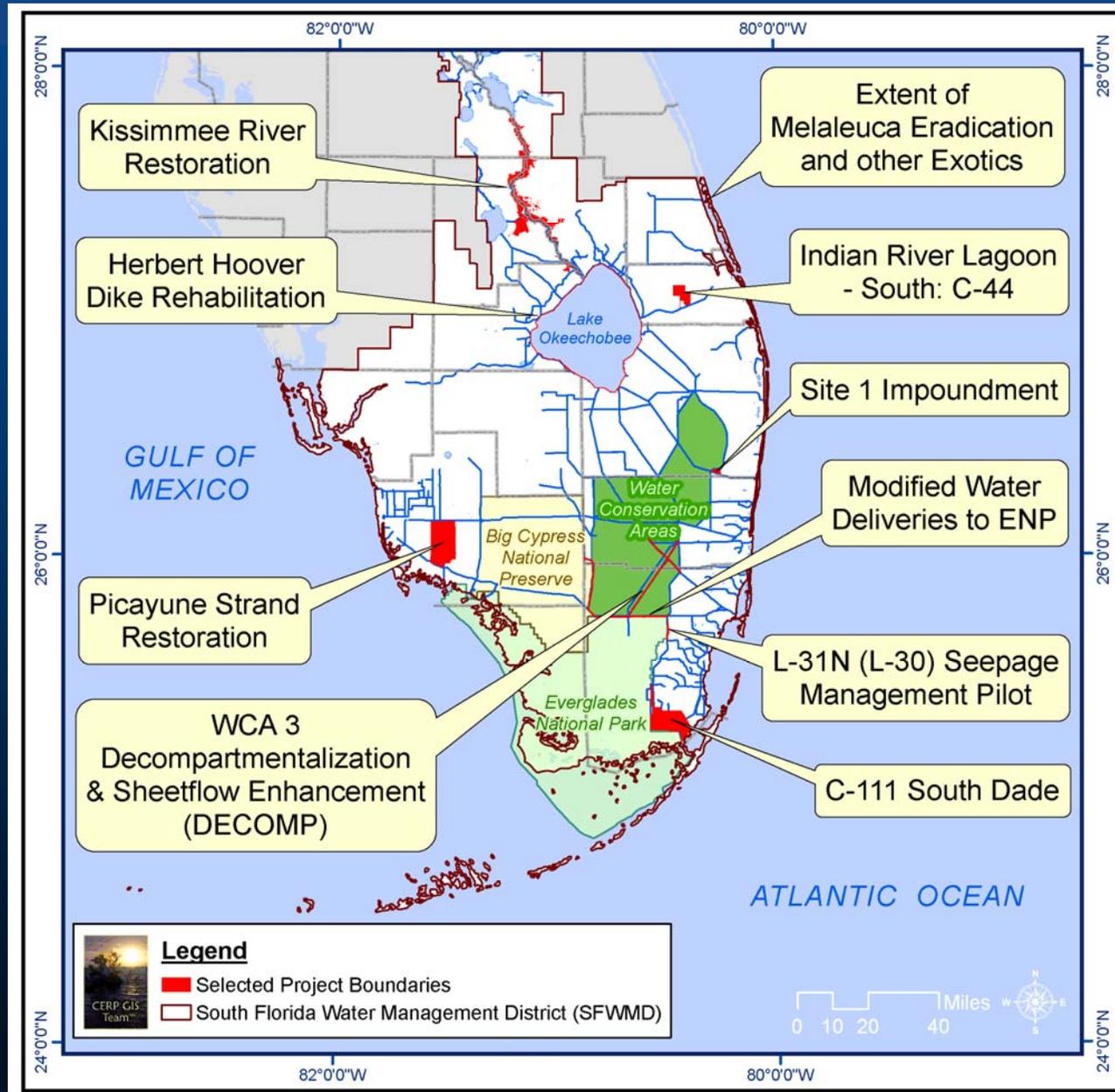
**South Florida  
Ecosystem  
Restoration  
Overview of Key  
Federal Projects**



restoration  
restoration

**Task Force Meeting  
June 24, 2009**

# Key Federal Projects



# Kissimmee River Restoration

## KISSIMMEE RIVER RESTORATION

Upper Basin Works Project

LAKE KISSIMMEE

River Ranch

AVON PARK BOMBING RANGE

Begin Backfilling

Remove S-65B

Remove S-65C

End Backfilling

S-65D

S-65E

LAKE OKEECHOBEE

River Acres

Remove S-65C

Remove S-65B

S-65A

S-65

LAKE ISTOKPOGA  
CANAL

### Description:

- Restores 27,000 acres in the lower Kissimmee River basin
- Includes backfilling of approximately 22 miles of the C-38 canal and re-establishing flow to 43 miles of contiguous river channel

### Status:

- Construction is complete on S-83 and S-84 spillways, S-65DX2 modifications, Reach 4a backfilling and radio tower relocation
- Post Authorization Change report is being prepared

### Schedule:

- |      |                                  |
|------|----------------------------------|
| 2009 | River Acres begin construction   |
| 2009 | S-65DX1 begin construction       |
| 2010 | C-37 Widening begin construction |
| 2010 | CSX RR Bridge begin construction |
| 2010 | Pool D Oxbow begin construction  |
| 2010 | U-Shaped Weir begin construction |

# Modified Water Deliveries to ENP



## Description:

- Restore the natural hydrological conditions within the Park "to the extent practicable"

## Status:

- S-355A & S-355B: Complete
- S-356: Complete
- L-67 Extension: 4 of 9 miles complete
- Tigertail Camp Raising: Complete
- 8.5 Square Mile Area: Construction complete
- Preliminary injunction lifted on Tamiami Trail Modifications
- Remaining features: Tamiami Trail; Swale Pilot Project, Osceola camp raising; L-67 and L-29 structures; combined operations plan

## Schedule:

2010

Swale Pilot Project

# C-111 South Dade



## Description:

- Provides ecosystem restoration benefits in Taylor Slough and the eastern panhandle of ENP
- Maintains flood protection for agricultural interests
- Includes canals, levees, pump stations and removal of 4.75 miles of impediments to create hydraulic ridge and restore flows to Taylor Slough

## Status:

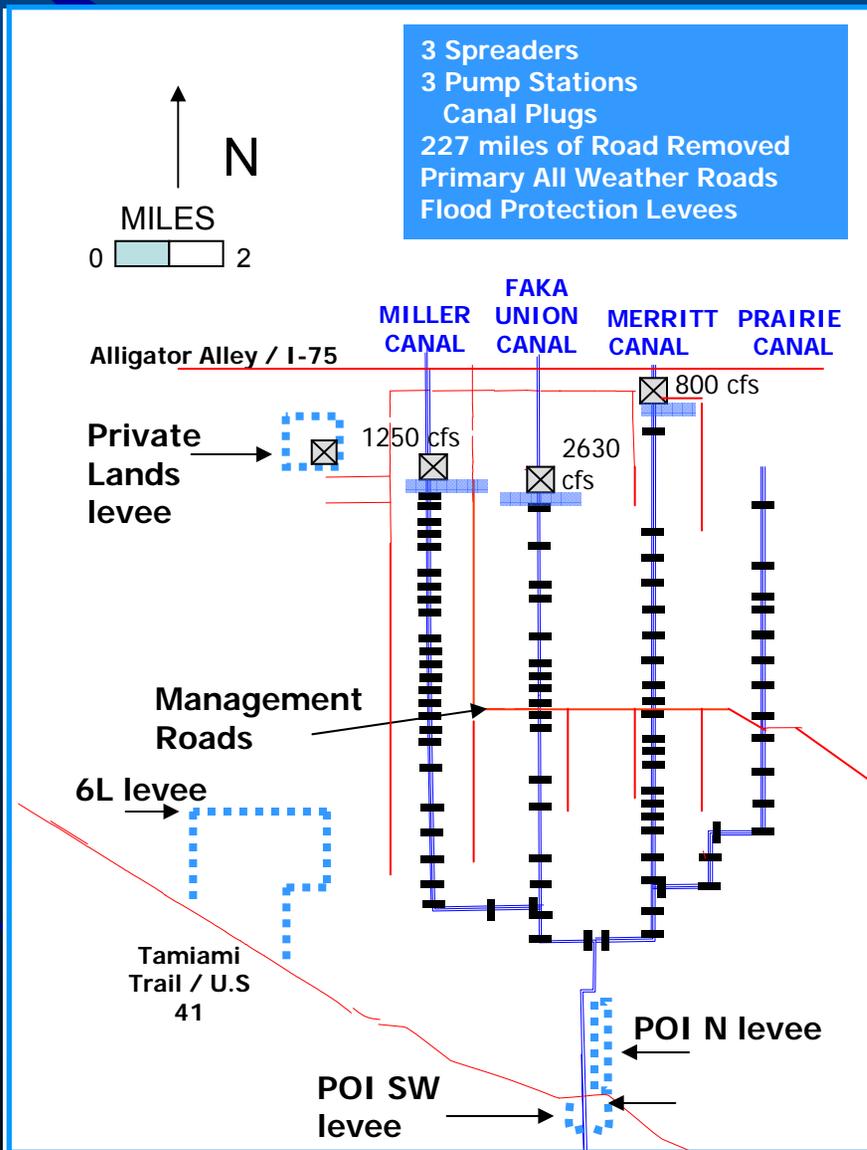
- Two interim pump stations and one permanent pump station complete
- Three detention areas complete
- Bridge replacement complete
- 4.75 miles of impediments removed
- Engineering Design Report and Post Authorization Change drafted

## Schedule:

2009-2010

Ongoing testing and design

# Picayune Strand Restoration



## Description:

- Restores wetlands in Picayune Strand and in adjacent public lands
- Other benefits include improved flows to Ten Thousand Islands area, improved water quality, and increased groundwater recharge
- Includes three pump stations, spreader canals, 40 miles of canal plugs, and removal of 227 miles of roads

## Status:

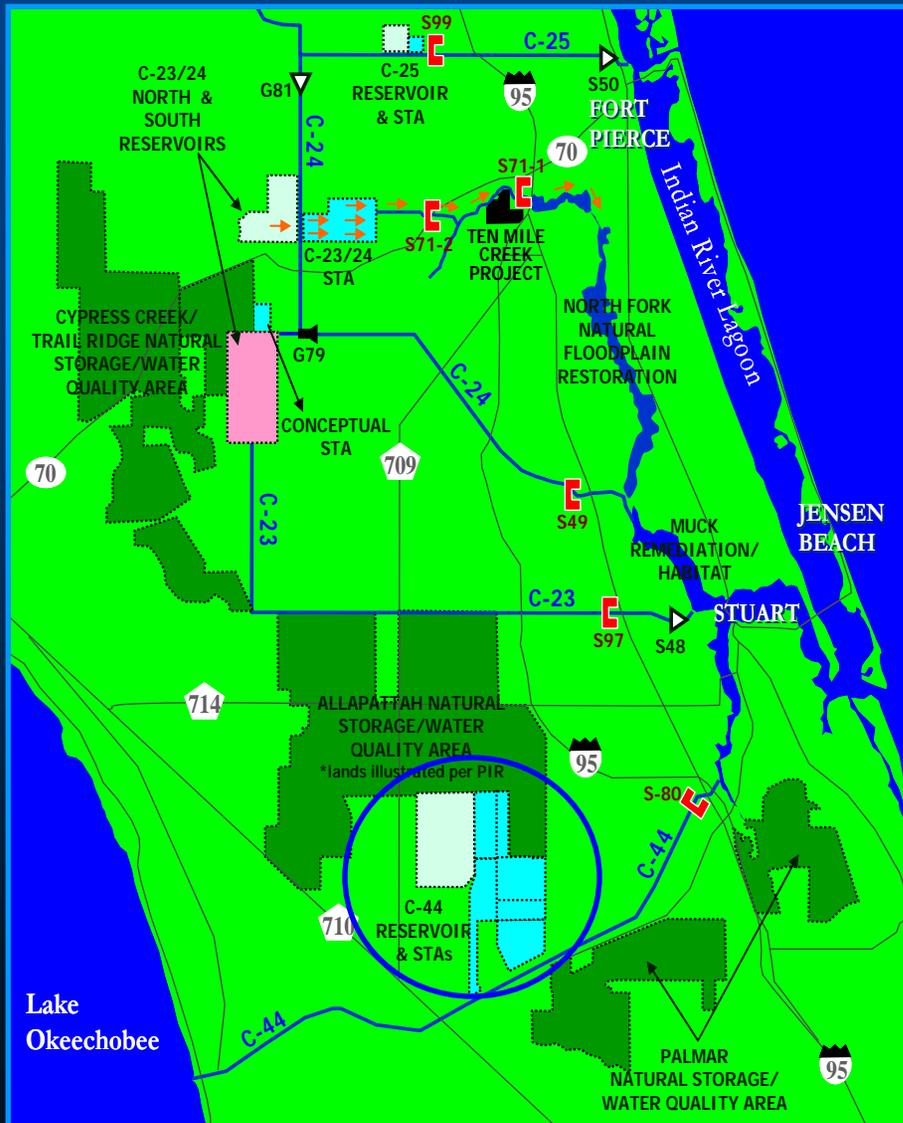
- Plans and specifications conversions complete for Merritt pump station, ongoing for Faka Union
- Water reservations completed
- Project Partnership Agreement execution pending resolution of land valuation and crediting issue for Master Agreement

## Schedule:

Sep 2009  
 Jun 2010

Merritt - begin construction  
 Faka Union - begin construction

# Indian River Lagoon-South: C-44 Reservoir and STA



## Description:

- 3,400-acre above-ground reservoir (50,600 acre-feet)
- 6,300 acres of stormwater treatment areas
- Attenuates flows to the St. Lucie Estuary
- Improves water quality
- Provides water for the environment and human needs
- Provides public access and recreational opportunities

## Status:

- Plans and specifications conversion ongoing
- Water reservations process underway

## Schedule:

2010 Begin construction

# Site 1 Impoundment

## Description:

- 1,600-acre above-ground impoundment (6,400 acre-feet)
- Captures runoff from the Hillsboro Watershed as well as releases from the Loxahatchee National Wildlife Refuge (LNWR) and Lake Okeechobee
- Reduces water withdrawals from the LNWR during the dry season
- Reduces fresh water flows and pulsed releases to downstream estuaries
- Reduces groundwater seepage from LNWR

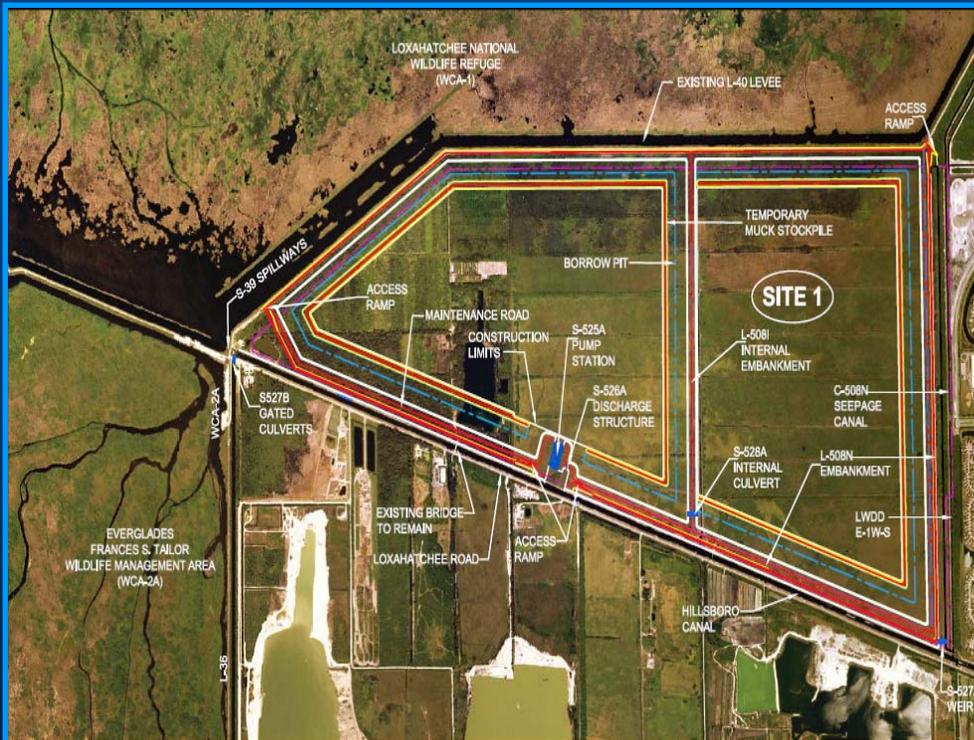
## Status:

- Plans and specifications ongoing

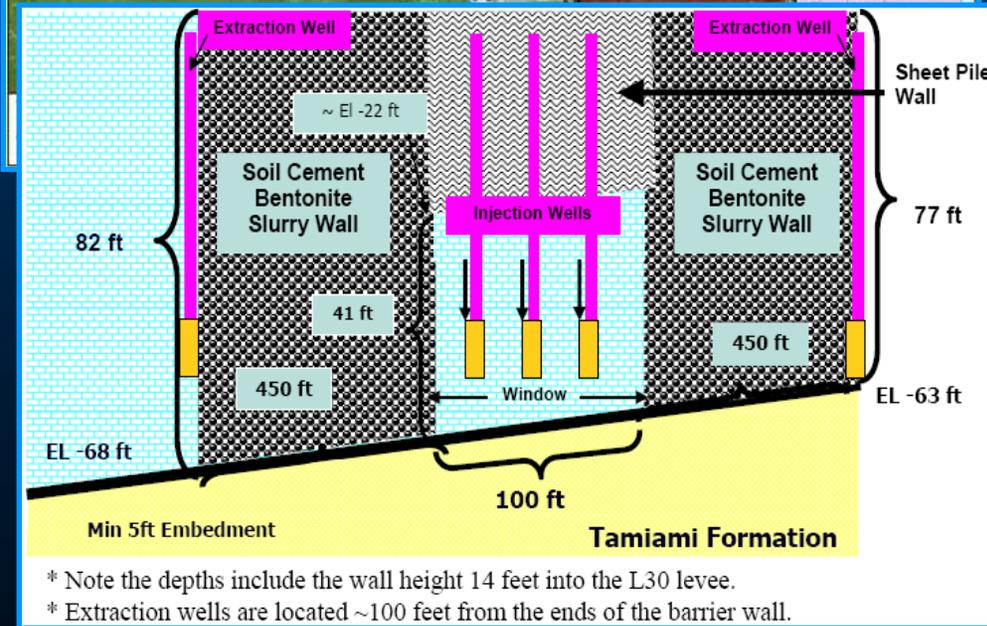
## Schedule:

May 2010

Begin construction



# L-31N (L-30) Seepage Management Pilot



\* Note the depths include the wall height 14 feet into the L30 levee.  
\* Extraction wells are located ~100 feet from the ends of the barrier wall.

## Description:

- Reduces uncertainties associated with seepage management technologies
- Tests two structural seepage reduction technologies (steel sheet pile and slurry wall) and ability to manage seepage via injection wells.

## Status:

- Final Pilot Project Design Report and EA complete
- Plans and specifications complete

## Schedule:

Aug 2009                      Begin installation and testing

# Melaleuca Eradication and Other Exotics



## Description:

- Provides increased production of biological control agents for invasive plant species Melaleuca, Australian pine, Brazilian pepper and Old World climbing fern
- Includes construction of an addition to the U.S. Department of Agriculture Invasive Plant Research Laboratory

## Status:

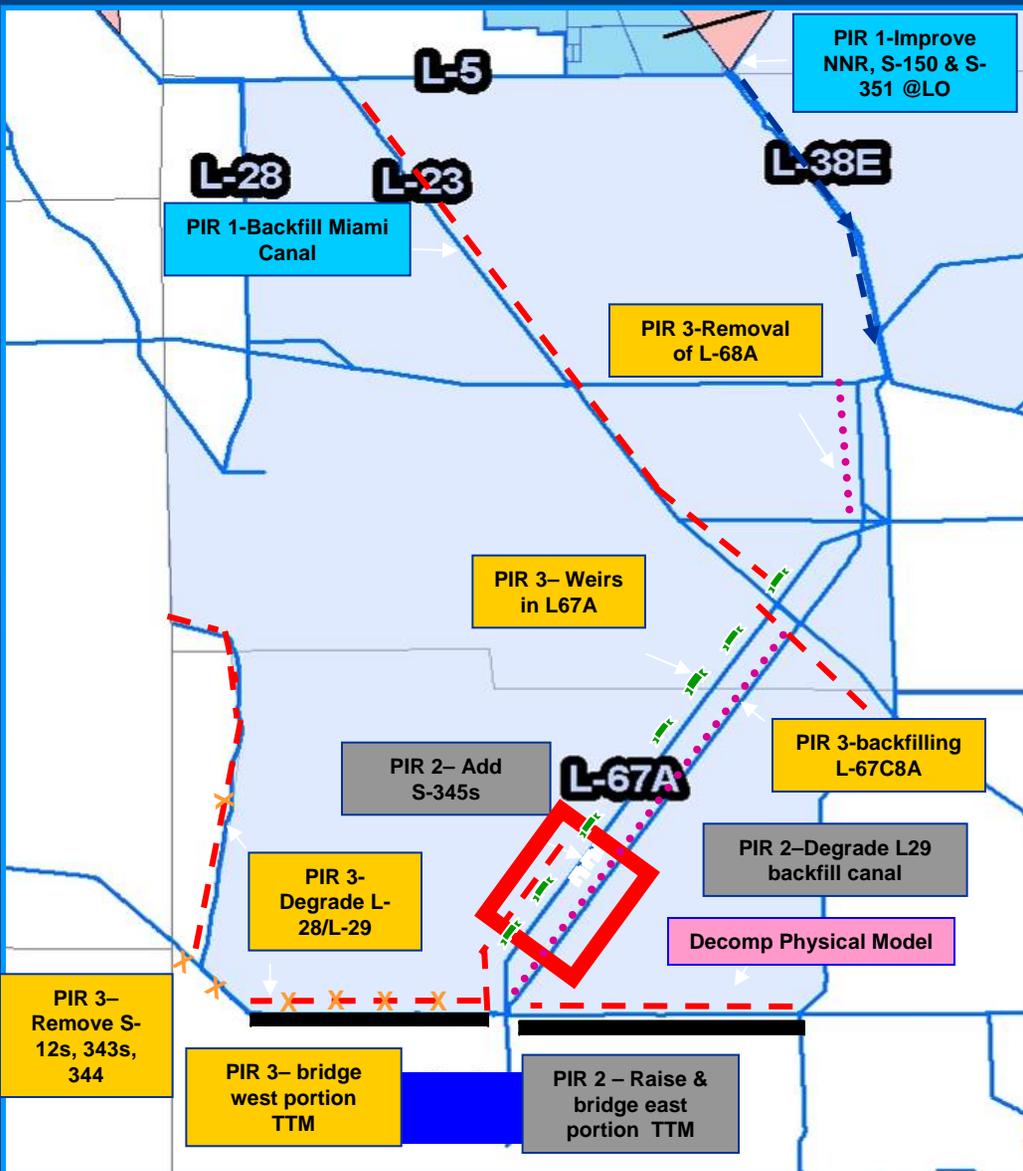
- Draft PIR complete, review ongoing

## Schedule:

Fall 2009  
2010

Final PIR  
Begin construction

# WCA 3 Decompartmentalization and Sheetflow Enhancement



## Description:

- Restores natural sheetflow patterns
- Fundamental to Everglades restoration
- Includes removal of canals, levees, and other barriers that impede natural sheetflow
- The Decomp Physical Model (DPM) is a fully reversible field test to address uncertainties of effects on sheetflow

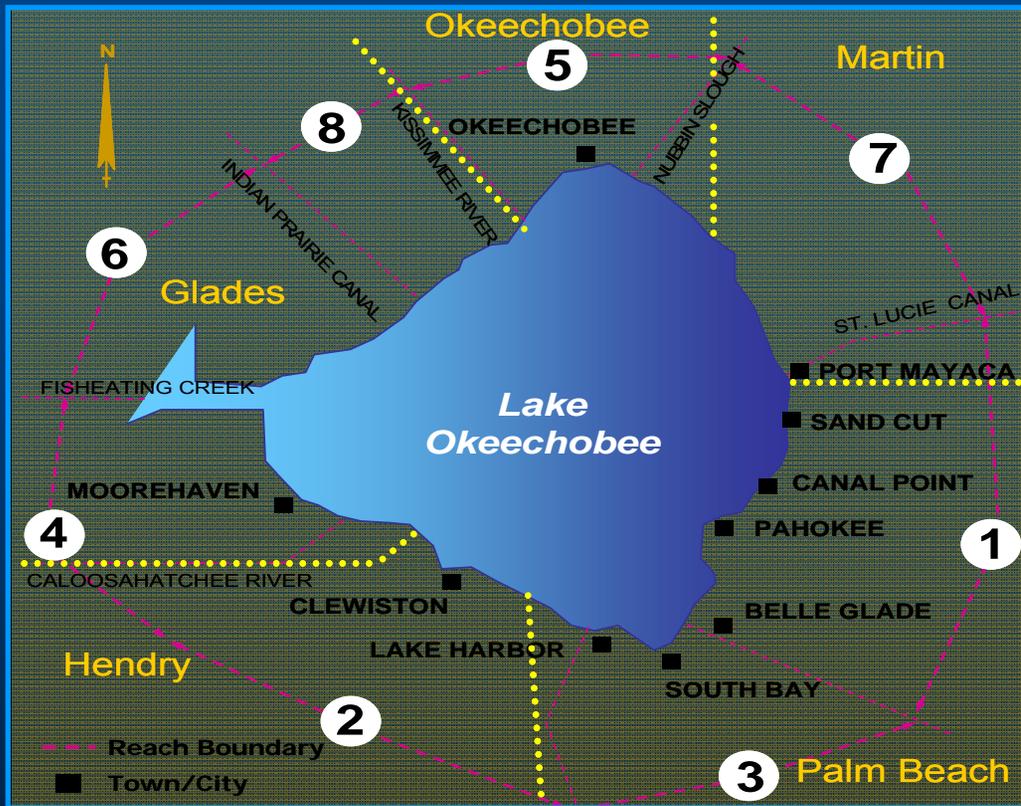
## Status:

- Decomp PIR 1 modeling of Miami Canal plugs to be completed June 2009
- DPM NEPA initiated
- DPM planning and engineering ongoing

## Schedule:

- 2011 Begin installation of DPM
- 2012 Final Phase I PIR

# Herbert Hoover Dike Rehabilitation



## Description:

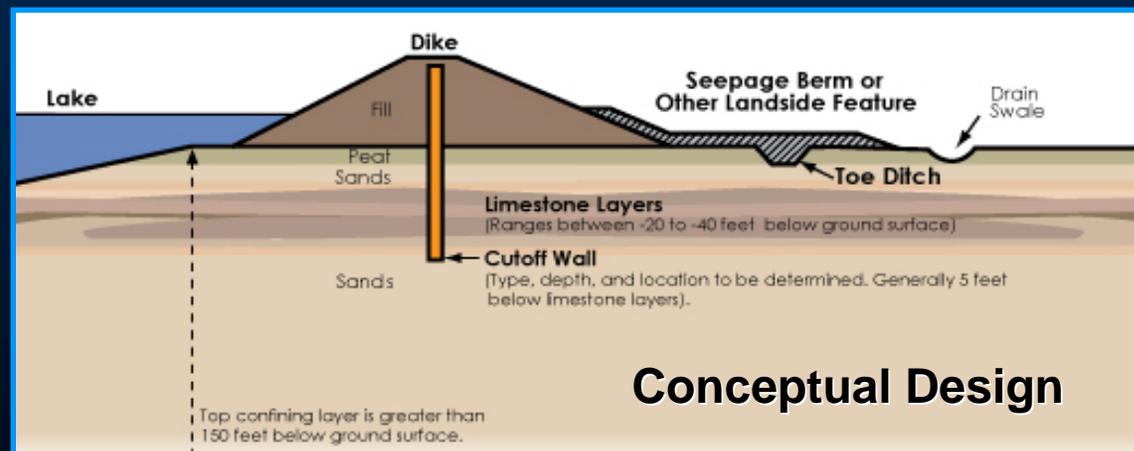
- Reinforces 143 miles of levee surrounding Lake Okeechobee
- Includes cutoff wall for increased stability and seepage berm for decreased piping as well as additional features where needed

## Status

- 4,000 feet of cutoff wall constructed; 10.3 miles awarded in reach 1
- Upcoming contract to fill quarries
- Reach 1 landside design near completion
- MRR for reaches 2&3 underway

## Schedule:

Aug 2009	Quarry Fill
Oct 2009	Reach 1B cutoff wall
Feb 2010	Reach 1C cutoff wall



# Integrated Delivery Schedule

- Guides sequencing of projects
- Developed with assistance of Task Force
- Responds to recommendations of NAS and GAO
- Provides sequencing for foundation projects as well as CERP projects
- Phases large projects to provide early benefits and learning
- Hybrid approach adopted – combines “Finish What’s on Our Plate” with common desire to pull projects such as Decomp forward

# Integrated Delivery Schedule Through 2020

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Federal Construction Cost (millions)</b>	<b>\$121</b>	<b>\$171</b>	<b>\$191</b>	<b>\$142</b>	<b>\$134</b>	<b>\$239</b>	<b>\$245</b>	<b>\$200</b>	<b>\$88</b>	<b>\$136</b>	<b>\$167</b>	<b>\$199</b>
Seminole Big Cypress	●	●										
West Palm Beach Canal/STA-1E	●	●										
C-111 SC Design Test	●	●										
L-31N Seepage Management Pilot Project	●	●										
C-111 South Dade	●	●	●	●								
Kissimmee River Restoration	●	●	●	●								
Modified Water Deliveries	●	●	●	●	●							
Picayune Strand Restoration - Merritt	●	●	●	●								
C-111 SC Phase 1	●	●	●	●								
Lakeside Ranch STA - Part of the Taylor Creek/ Nubbin Slough Storage and Treatment Area	●	●	●	●								
Picayune Strand Restoration - Faka Union	●	●	●	●								
Site 1 Impoundment	●	●	●	●	●	●						
C-44 Reservoir/STA	●	●	●	●	●	●	●					
Biscayne Bay Coastal Wetlands Phase 1	●	●	●	●								
Decomp Physical Model	●	●	●	●	●							
C-43 West Reservoir	●	●	●	●	●	●						
Melaleuca Eradication and Other Exotic Plants	●	●	●	●	●	●	●	●	●	●	●	●
Broward County - C-11 Impoundment	●	●	●	●	●	●	●					
Decomp PIR 1	●	●	●	●	●	●	●	●	●	●	●	●
ENP Seepage Management	●	●	●	●	●	●	●	●	●	●	●	●
Broward County - C-9 Impoundment	●	●	●	●	●	●	●	●	●	●	●	●
Picayune Strand Restoration - Miller	●	●	●	●	●	●	●	●	●	●	●	●
Decomp PIR 2	●	●	●	●	●	●	●	●	●	●	●	●
Decomp PIR 3	●	●	●	●	●	●	●	●	●	●	●	●
Lake Okeechobee Watershed	●	●	●	●	●	●	●	●	●	●	●	●
Broward County - WCA 3A&3B Levee/S-356	●	●	●	●	●	●	●	●	●	●	●	●
Herbert Hoover Dike Rehabilitation	●	●	●	●	●	●	●	●	●	●	●	●
Long-Term Plan for Achieving Water Quality Goals in the Everglades Protection Area Projects	●	●	●	●	●	●	●	●	●	●	●	●
EAA Reservoir Phase A-1	●	●	●	●	●	●	●	●	●	●	●	●

Projects in black are currently federal construction.

Projects in blue are currently non-federal construction, subject to change based on funding allocation.

TO BE DETERMINED

5 Jun 09

# Anticipated Projects for Next WRDA

- Kissimmee River Restoration (reauthorization)
- C-43 West Basin Storage Reservoir
- C-111 Spreader Canal Phase 1
- Biscayne Bay Coastal Wetlands Phase 1

# Programmatic Regulations Review



- Current regulations promulgated in November 2003 by Secretary of the Army with concurrence of Secretary of the Interior and the Governor of Florida
- Review of programmatic regulations required by WRDA 2000 at least every five years
- Scoping conducted May – August 2008
- Team currently developing concepts to simplify and streamline CERP implementation process
- Anticipate initiating formal rulemaking process in January 2010

**Questions?**

