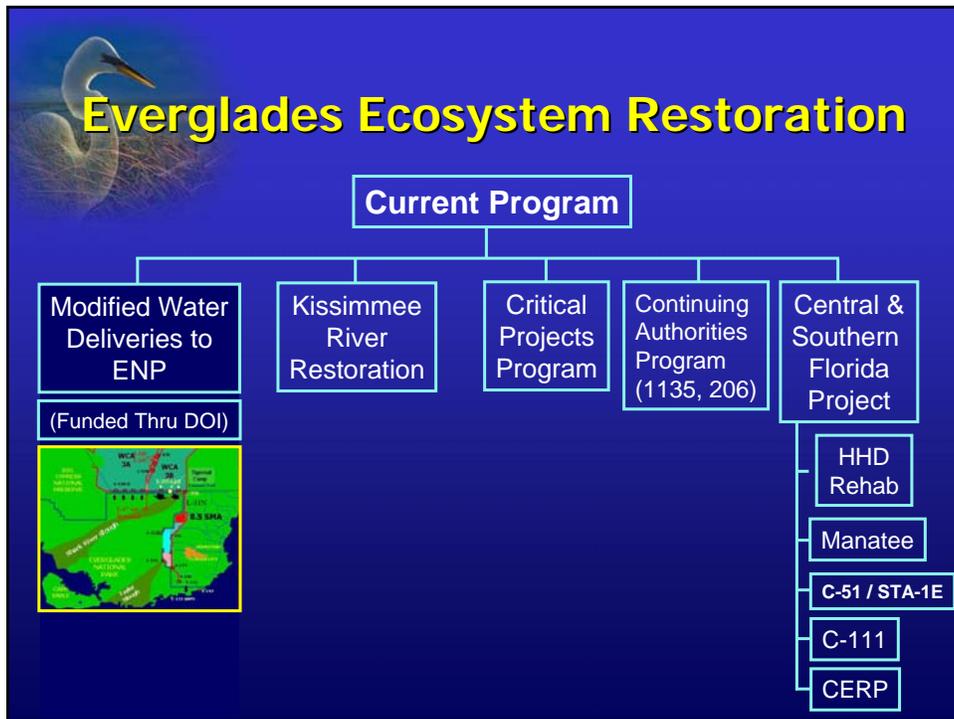


the journey to restore
America's Everglades

Program Update
WRAC
June 5, 2008

South Florida
Everglades
Ecosystem Restoration Program



Modified Water Deliveries to Everglades National Park



Authorized as part of the Everglades National Park Expansion Act of 1989:

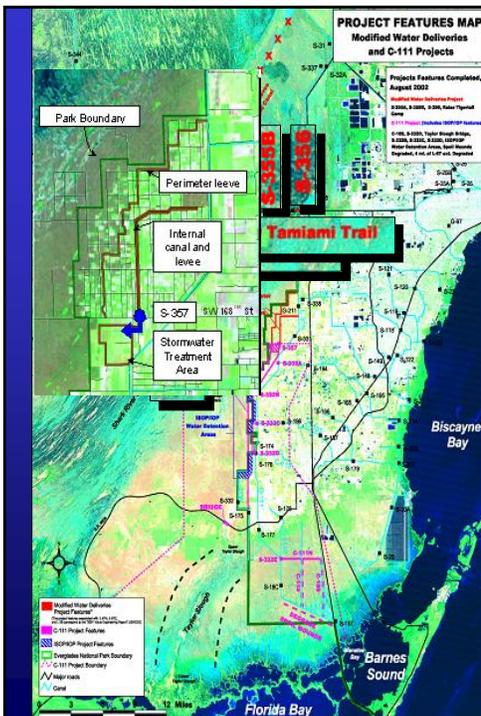
- \$398 million
- to be constructed by the Corps of Engineers

Includes:

- Re-establishing flow along historical flow path into ENP.
- Protection of developed areas, housing, businesses, and agriculture areas
- Improvement to Tamiami Trail to allow greater flows and higher water levels

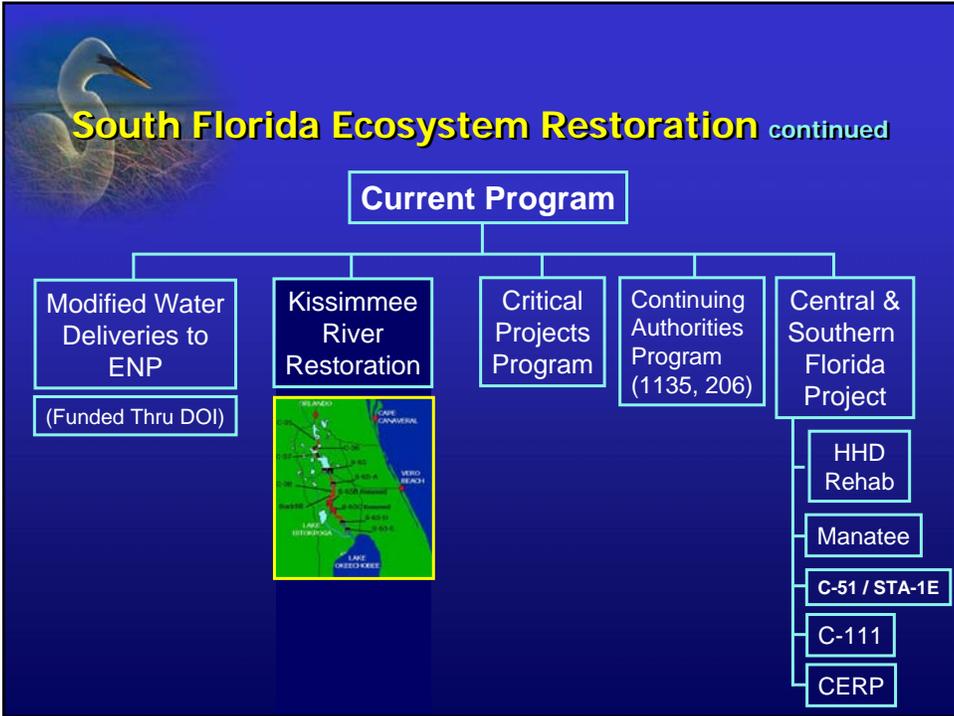
Status:

-Construction is underway

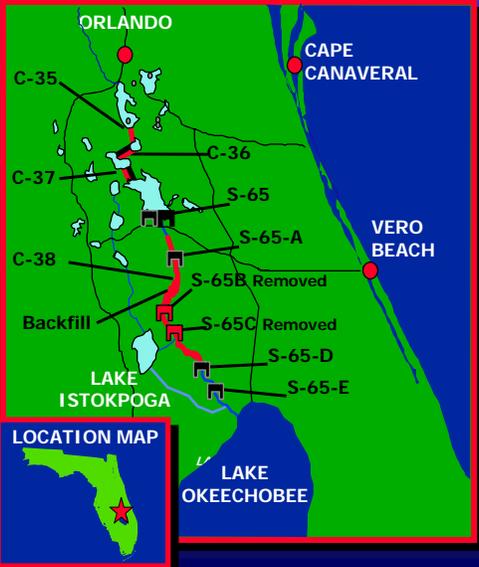


MWD Project Completion Status

- Constructed S-355 A and S-355 B in L-29 levee
- Raised Tigertail Camp
- Degraded lower 4 miles of the L-67 extension canal and levee
- Constructed Interim S-356 pump station for seepage control
- Final LRR for Tamiami Trail Modifications to Congress 1 July
- Construction of the 8.5 SMA physically complete 30 May
- Working 8.5 SMA Draft Operations Plan with PDT
- Construction of the L-67 conveyance features remains
- Draft CSOP TSP revisions remain



Kissimmee River Restoration



Modification to the completed Kissimmee Flood Control Project in 1992. - \$580 million

Major components:

- Filling in 22 miles of canal previously dug as part of flood control project
- Acquiring over 55,000 acres of lands for restoration
- Modifying water control structures to allow (higher water levels and pass more flow

Status:

- 10 miles backfilled
- additional construction underway

Kissimmee River Restoration

C-38 Backfill – Reach 4A

Completed October 2007



Pre-construction



May 21, 2007

Kissimmee River Restoration

Structure S83A & S-84

Completed October 2007



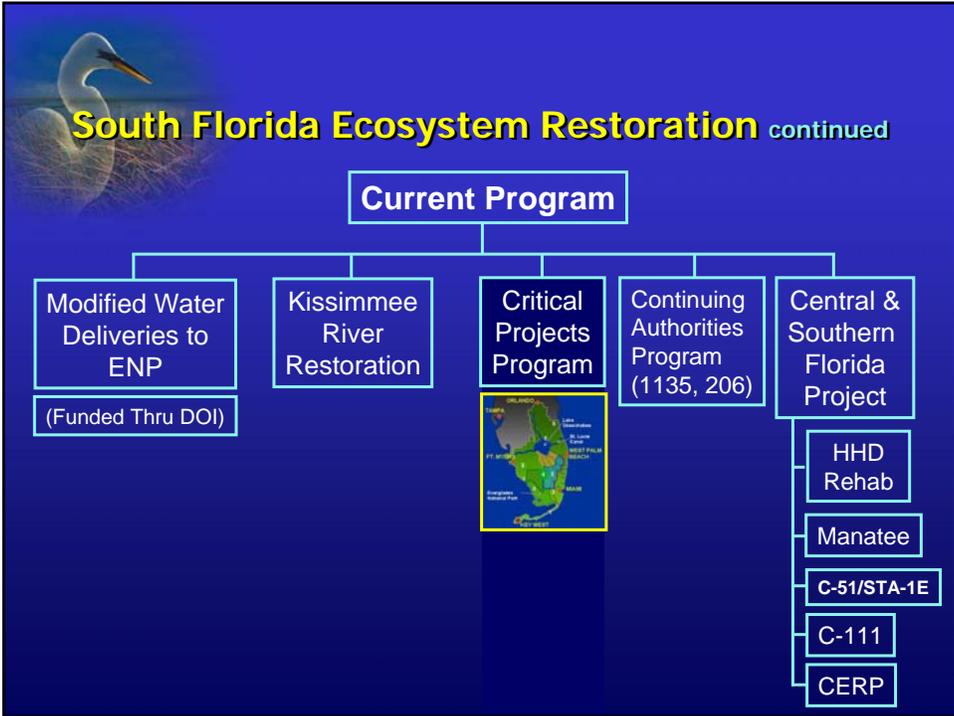
Kissimmee River Restoration Structure S65DX2 Completed September 2007



Kissimmee River Restoration FY 2008

- S68A spillway 50% complete, anticipate completion in November 2008
- Istokpoga features – S-67 structure & 2 boat ramps underway, complete Feb 09
- Contract expected to be awarded June 2008 for additional 3.7 miles C-38 backfill





Critical Ecosystem Restoration Projects

Special Program authorized by Congress in 1996 at total cost of \$150 million



ORLANDO
TAMPA
FT. MYERS
WEST PALM BEACH
MIAMI
KEY WEST

Lake Okeechobee
 St. Lucie Canal
 Everglades National Park





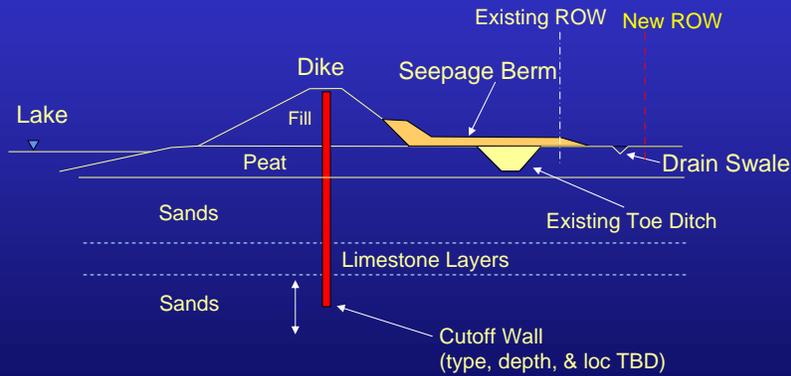
1. Keys Carrying Capacity
2. C-4 East Coast Canals
3. Western C-11
4. **Seminole-Big Cypress**
5. **Ten Mile Creek**
6. **Lake Okeechobee**
7. **Southern CREW**
8. **Tamiami Trail Culverts**
9. **Lake Trafford Restoration**

Central & Southern Florida Project



- 10 Initial Projects
- Pilot Projects
- Other Projects

Concept Design for Rehabilitation of Levee



NOT TO SCALE

HHD Major Rehabilitation

Rehabilitation Schedule

- **Continue Reach 1 construction**
- **Budgets**
 - FY 2008: \$54.8 million
 - FY 2009: \$77.4 million
- **Completion dates**
 - Reach 1: 2008 – 2013
 - Reaches 2 and 3: 2011 – 2020
 - Reach 7: 2020 – 2024
 - Reaches 4, 5, 6 and 8: 2025 – 2030

HHD Reach 1

- **NEPA Activities**
 - Environmental Assessment (EA) being completed for toe ditch fill in focus areas 1 and 6, and culvert 14 removal
 - Final EA required prior to construction on these features
- **Environmental Impact Statement – Reach 1**
 - Scheduled completion is Sept 09
 - Required prior to land acquisition and construction of landside rehabilitation
- **Real Estate Acquisition**
 - Coordinating required land acquisition with South Florida Water Management District for landside rehabilitation

HHD Reach 1

- **Landside design**

- Reach 1A design Sept 08
- Reach 1B and 1D design Apr 09
- Reach 1C landside rehabilitation contract will be awarded upon finalizing Reach 1B and 1D design criteria
- Filling in quarry (focus area 2, Reach 1D) design options are being explored by Jacksonville District staff
- Continued review, coordination with industry experts, other Corps districts, vertical team, dam safety experts and independent technical review

HHD Reach 1

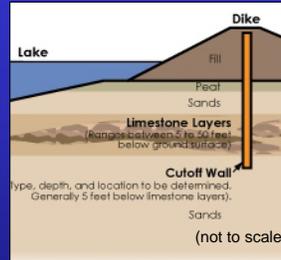
- **Current Construction**

- Seepage berm contract in Reach 1A completed in Feb 08
- Removal of melaluca trees in Reaches 2 and 3 by South Florida Operations office ongoing with completion expected in Jun 08
- First cutoff wall contract in Reach 1A
 - Contractor completing 3,500-foot section of cut-off wall



Reach 1 Cut-off Wall

- Awarded to three contractors
- Performance based contracts
 - Wall no wider than 36 inches
 - Depth based on geology, ranges from 60 feet deep
- Provides the internal fix
 - Unknown locations of piping channels in dike, foundation and limestone layers
 - Fix prevents future piping through layers and cuts-off existing pipes
 - Does not interrupt seepage through deep sand layer



Reach 1 Cut-off Wall



Task order 1 is ongoing near Port Mayaca

- Issuing multiple task orders
 - Cut-off wall task order 2 (southern end of Reach 1A) was awarded on May 23, 2008 to the Bauer Foundation
 - Cut-off wall task order 3 (Reach 1D) award expected in mid-Jun 08
 - Cut-off wall task order 4 (Reach 1D) proposal period will begin upon award of task orders 3 and 4

HHD Reaches 2 & 3

- **Major Rehabilitation Report (MRR)**

- System analysis and risk assessment phase of MRR is ongoing with expected Dec 08 completion
- Field investigations (NEPA, surveying and geotechnical investigations ongoing)
- Draft MRR on Reaches 2 & 3 expected in May 09, with final expected in Dec 09

Herbert Hoover Dike

- **Interim Risk Reduction Measures**

- Implementing new Lake Okeechobee Regulation Schedule
- Developing measures to address specific failure modes
- Addressing focus areas now
- Emergency action planning with state and local agencies
- Corps Emergency Plan
 - Equipment and 47,000 tons of materials prepositioned at more than 20 locations around the dike
 - Immediate response teams
 - Increased inspection frequency as the lake rises
 - Contracts in place for manpower, equipment and materials

Central & Southern Florida Project

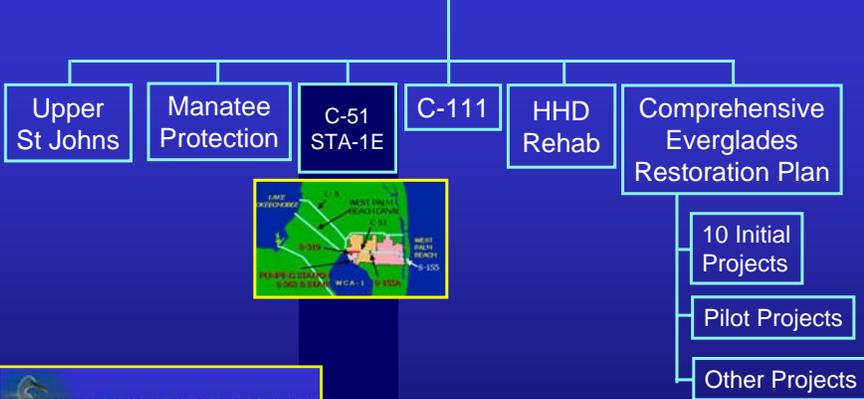


CENTRAL AND SOUTHERN FLORIDA PROJECT

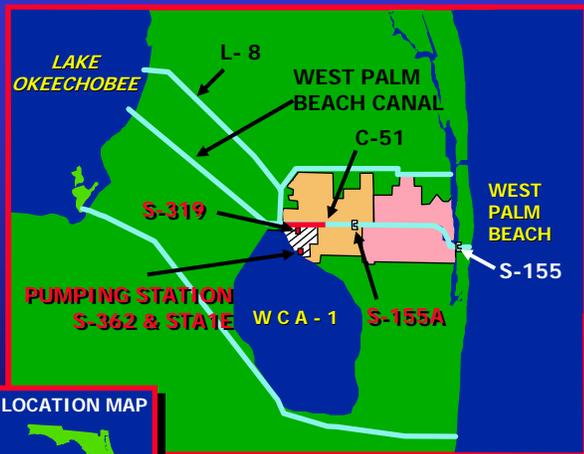
Manatee Pass Gates

Phase 1 complete
Phase 2 – S-78 near completion; Port Myaca & St. Lucie Lock July 2008

Central & Southern Florida Project



CENTRAL AND SOUTHERN FLORIDA PROJECT West Palm Beach Canal (C-51) / STA 1E



Flood Control project modified in 1996 to also improve quality of water discharged into Everglades:

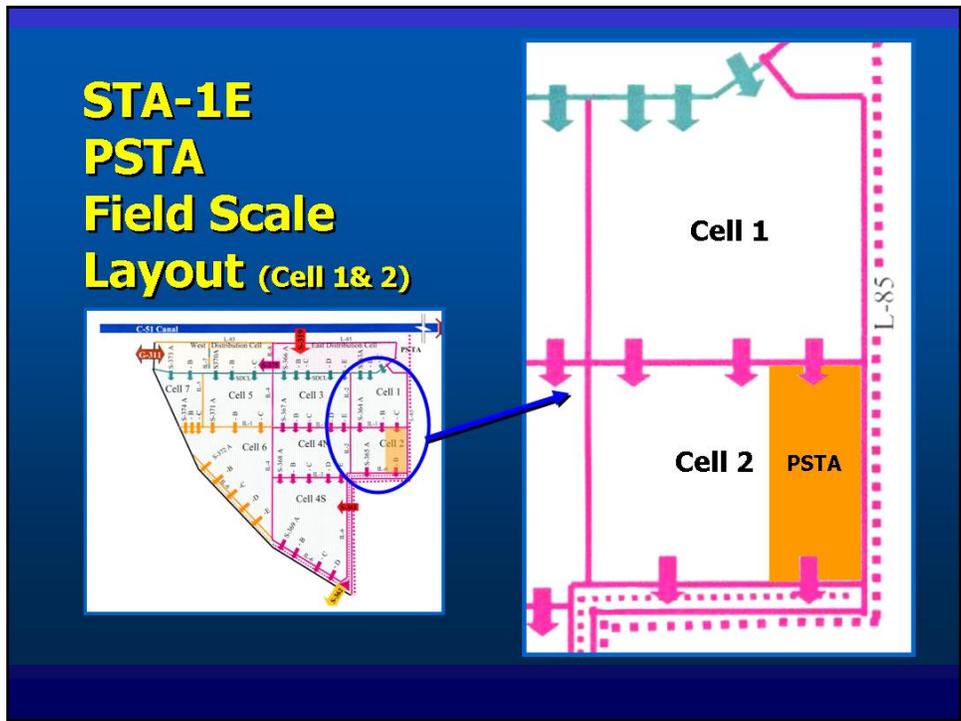
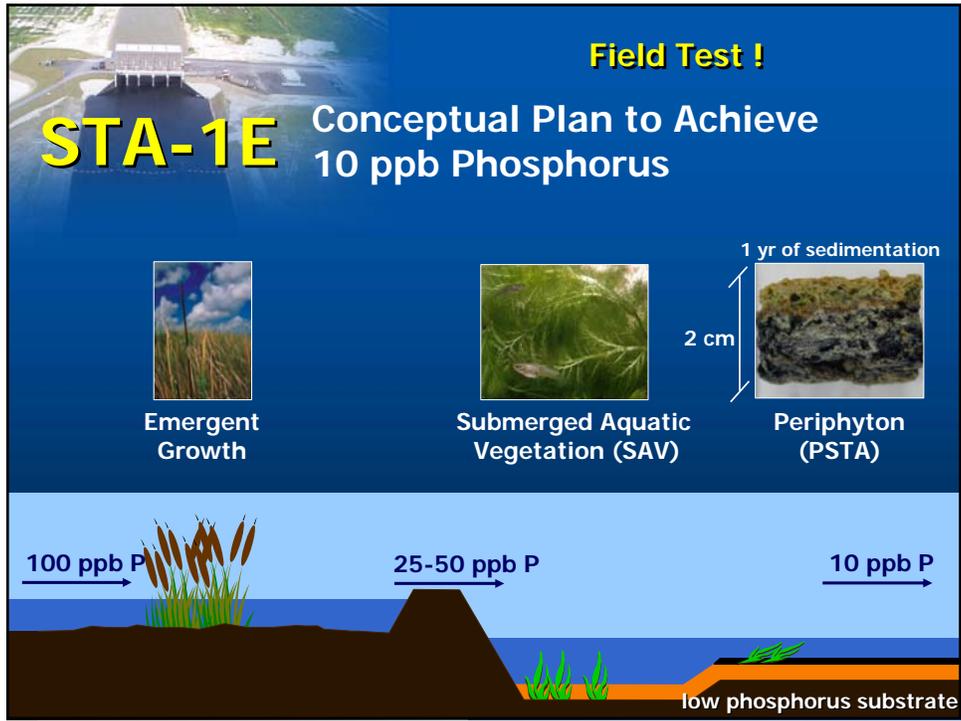
- \$270 million

Includes:

- 2 Major Pump Stations at 4000 CFS each
- 10 square mile water treatment area called an Stormwater Treatment Area or STA
- Canal Widening

Status:

- Major work is complete
- PSTA Field-scale Demonstration Test and Mesocosm Tests underway



Central & Southern Florida Project



CENTRAL AND SOUTHERN FLORIDA PROJECT SOUTH DADE COUNTY (C-111)



Project is modification to existing features of C&SF project to improve water discharges to ENP:

- \$250 million

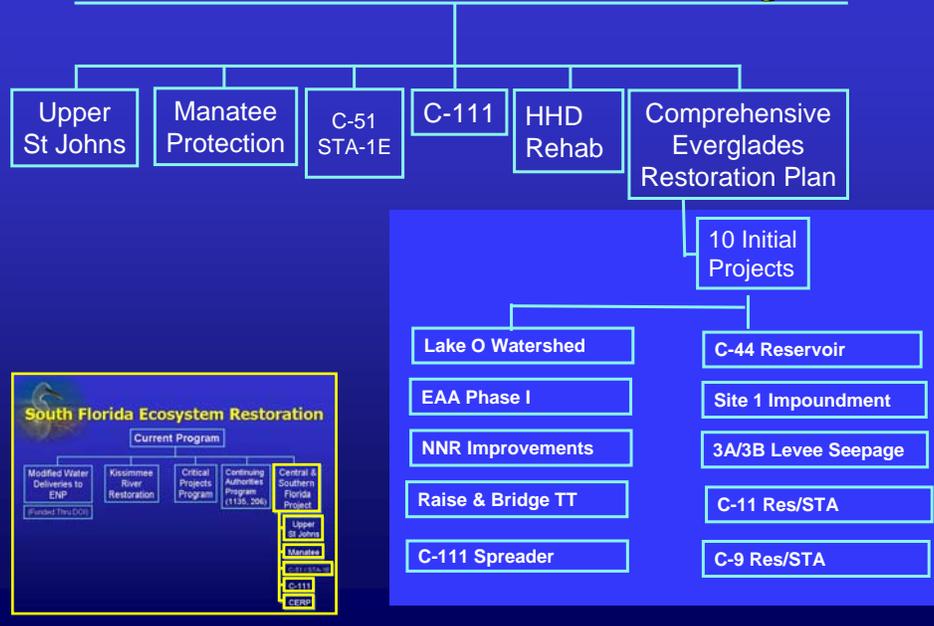
Features:

- Construction of 4 500 cfs pump stations
- Construction of a 10 mile long detention and buffer area to capture flood water discharges and separate ENP from developed areas.

Status:

- Construction of land swap areas that will complete continuous detention area from S-332B to S-332D underway

Central & Southern Florida Project



CERP 10 Initial Projects

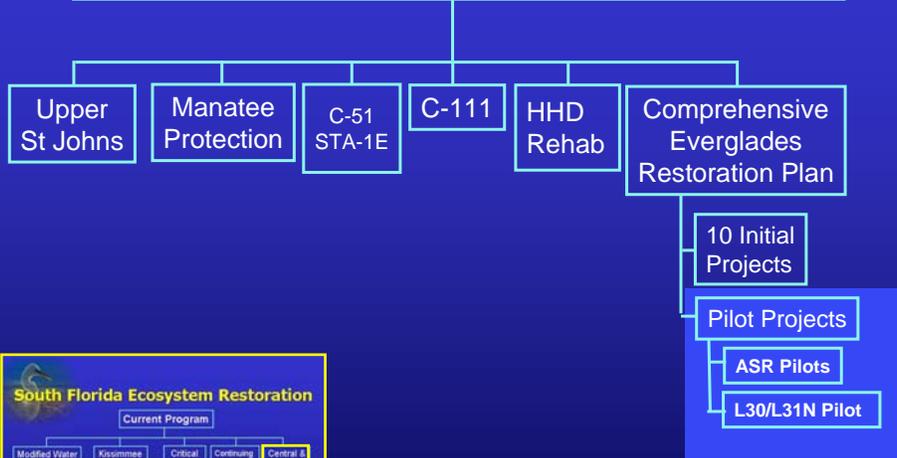
SFWMD Accelerated Construction

- C-44
- EAA Phase I
- C-111 Spreader

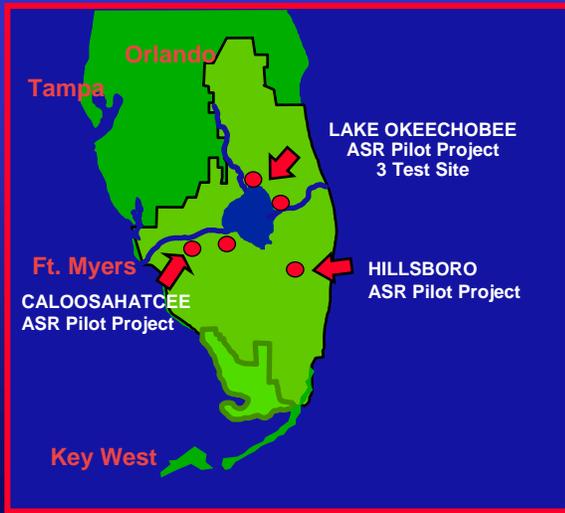
Corps PIR and Design

- Site 1 Impoundment Authorized – P&S underway
- Broward WPAs (C-9, C-11 3A/3B seepage) – Chiefs Report pending, preliminary design complete and field investigations underway for C-11 design
- EAA Phase I PIR – IOR modeling and DPOM initiated, draft PIR Jan 2009
- C-111 Spreader – Draft PIR in Federal Register Feb 2009
- LOW PIR – IPR with HQ/SAD scheduled 15 July 08, draft PIR August 2009
- Decomp (NNR & Raise TT) – FSM in June 2008, team looking at feasibility of including next increment above MWD for flows to ENP for Corps and SFWMD management review

Central & Southern Florida Project



Aquifer Storage & Recovery Pilots Field Test for Lake Okeechobee Sites



CERP Pilot Projects

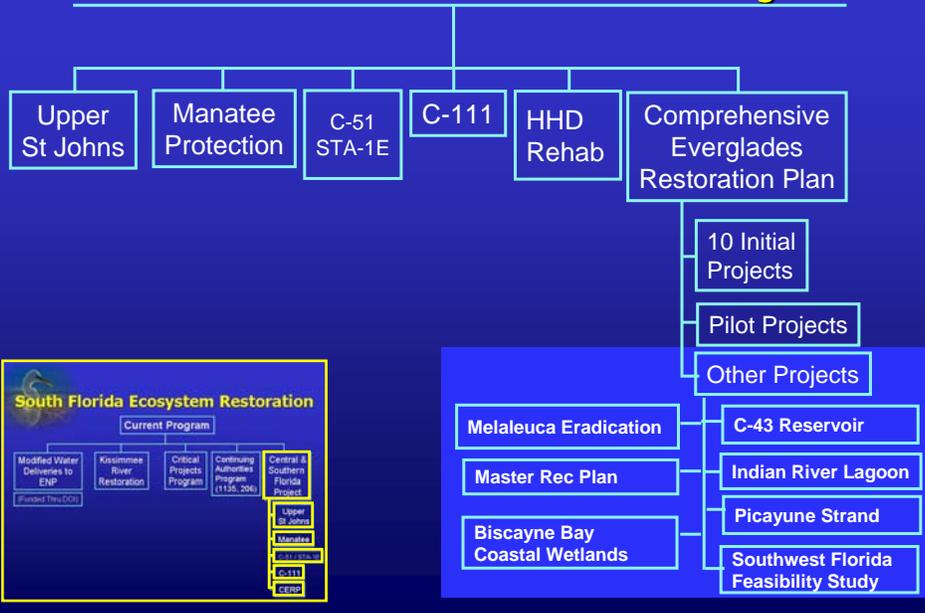
ASR Pilot Project

- Kissimmee River ASR Pilot - construction complete, 1-cycle test completed, drought conditions delaying further testing
- Lake Okeechobee ASR Pilot – construction completed
- Hillsboro ASR Pilot – construction completed
- C-43 ASR Pilot – test well to be plugged after obtaining FDEP approval

L30/L31 Seepage Management Pilot

- Preliminary Draft Pilot Project Design Report distributed to PDT
- May 2008 Internal Technical Review completed
- May 2008 Underground Injection Permit received
- June 2008 WQ Monitoring Plan/CEPRA package to FDEP for review
- July 2008 Submit DPPDR to SAD/HQ for review
- August 2008 External Peer Review & Public/Agency Review DPPDR

Central & Southern Florida Project



Other CERP Projects

- IRL Authorized – P&S for C-23/24 STA underway
- Picayune Strand – Construction NTP Merritt Pump Station Jan 09
- C-43 Reservoir – Chiefs Report pending
- Biscayne Bay Coastal Wetlands – public review draft PIR Nov 08
- Southwest Florida Feasibility Study – AFB Nov 08, Draft PIR Federal Register April 09
- Melaluca Eradication – Draft PIR Federal Register August 08
- Master Recreation Plan – public review of draft regional concept plans completed, draft MRP June 09
- Systems Operating Manual v2 – complete PMP Nov 08
- ASR Contingency Report – preliminary interim report Aug 08
- Environmental and Economic Equity – efforts underway to develop methodology for analyzing EEE impacts on project specific basis
- Monitoring and Assessment Plan – on-going

Thank You?

