



Everglades Restoration Update

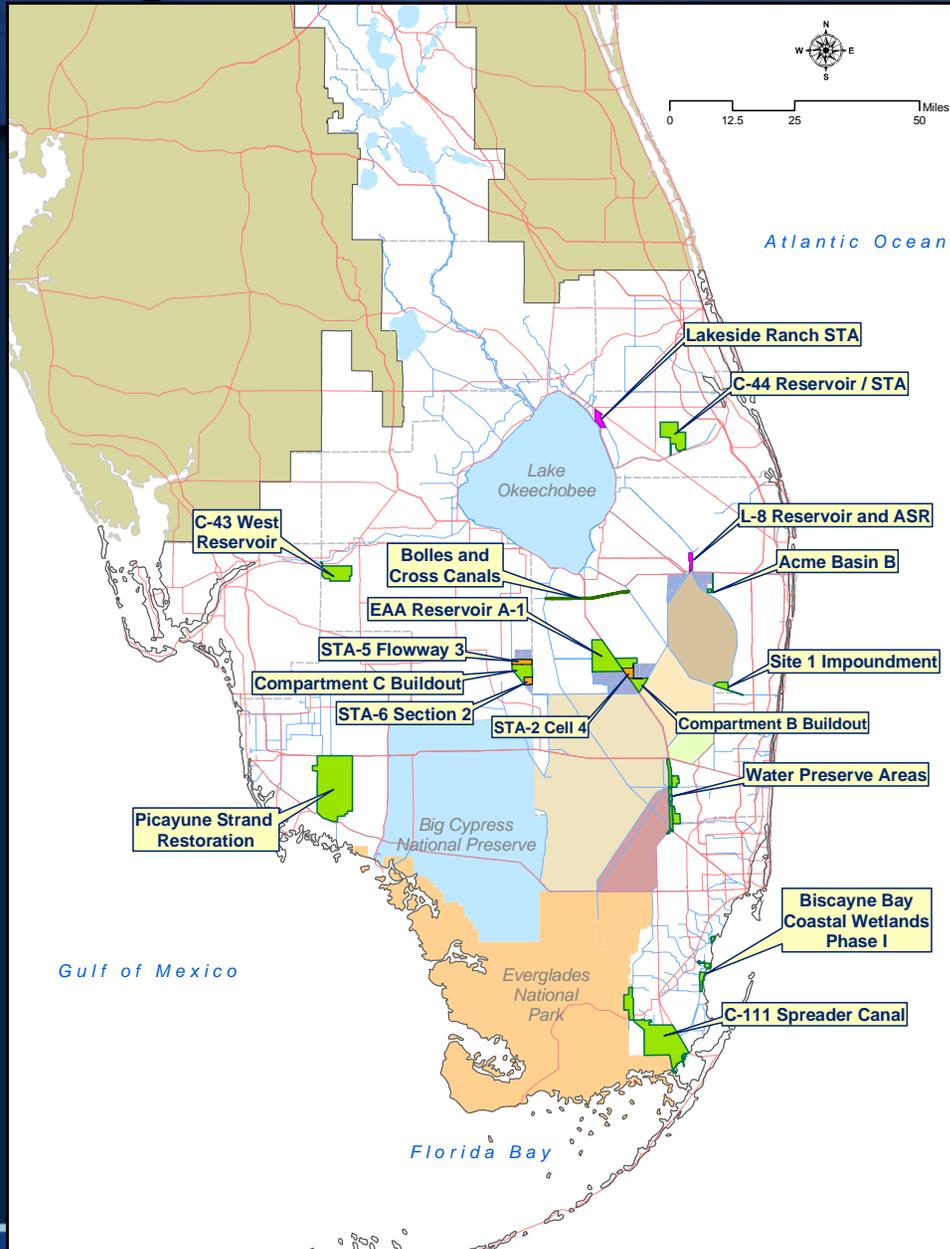
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South Florida Ecosystem Restoration Task Force Meeting
September 26 – 27, 2007

sfwmd.gov



Everglades Restoration Projects





Restoration Construction Update

September, 2007





CONSTRUCTION COSTS: \$361 MILLION

STA 2 Expansion (Gulf Group)	\$ 18.2 M	Completed
STA 5 Expansion (Interlaken)	\$ 12.0 M	Completed
STA 6 Expansion (Harry Pepper)	\$ 22.4 M	Completed
Acme Basin B (Harry Pepper)	\$ 5.3 M	Completed
EAA Test Cells (Barnard)	\$ 8.4 M	Completed
C-43 Test Cells (Barnard)	\$ 10.0 M	Completed
C-44 Test Cells (Barnard)	\$ 9.0 M	Completed
C-44 TIWCD Reconfig (CAN Const)	\$ 1.4 M	Completed
C-44 Site Prep Phase I (Overland)	\$ 0.5 M	Completed
C-44 Site Prep Phase II (Running W)	\$ 3.9 M	87% complete
Manatee Barrier (LJ Clark)	\$ 0.4 M	Completed
Picayune - Demolition (Cross)	\$ 1.5 M	Completed
Picayune - Prairie Canal (Globetec)	\$ 2.2 M	Completed
Picayune - Road Removal (AEM)	\$ 3.5 M	Completed
EAA Resvr - Seepage Canal (BPJV)	\$ 53.7 M	Completed
EAA Resvr - Rock Crushing (BPJV)	\$112.7 M	17% complete
EAA Resvr - Remainder of Seepage Canal (BPJV)	\$ 95.9 M	59% complete





STA 2 CELL 4 EXPANSION

Contractor: Gulf Group
Consultant CM: Brown & Caldwell
ERRA Construction Mgr: Marty Braun
ERRA Project Mgr: Maria Clemente

- Design: April 28, 2005 – Oct 4, 2005
- Construction Start: Jan 11, 2006
- Flow Capable: Nov 11, 2006
- Final Completion: Aug 7, 2007
- Construction Contract: \$ 18.4 Million



- 2015 acres of STA (Compartment B)
- 6 gated inflow structures
- 4 gated outflow structures





STA 5 FLOW-WAY 3 EXPANSION

Contractor: Interlaken

Consultant CM: URS

ERRA Construction Mgr: Miguel Cruz

ERRA Project Mgr: Maria Clemente

- Design: Feb 7, 2005 – Oct 28, 2005
- Construction Start: Jan 19, 2006
- Flow Capable: Nov 21, 2006
- Final Completion: May 25, 2007
- Construction Contract: \$ 12.9 Million



- 2,560 acres of STA (Compartment C)
 - 6 gated water control structures
 - Upgrades to G-406 control structure





STA 6 SECTION 2 AND SECTION 1 MODIFICATIONS

*Contractor: Harry Pepper & Assoc.
Consultant CM: URS
ERRA Construction Mgr: Miguel Cruz
ERRA Project Mgr: Maria Clemente*

- Design: Jan 24, 2005 – Dec 1, 2005
- Construction Start: Feb 7, 2006
- Flow Capable: Dec 11, 2006
- Final Completion: July 30, 2007
- Construction Contract: \$ 23.4 Million



- 1,440 acres of STA (Compartment C)
- 7 gated water control structures (Sec 2)
- 3 gated water control structures and one pumping structure (Sec 1)





ACME BASIN B - C-1 CANAL & PS-7

Contractor: Harry Pepper & Assoc
Consultant CM: Arcadis
ERRA Construction Mgr: Rich Bartlett
ERRA Project Mgr: Jorge Jaramillo

- Construction Start: July 7, 2006
- Substantial Comp. I: Dec 20, 2006
- Terminated: Feb 20, 2007
- Construction Contract: \$5.0 Million
- Canal & Temporary Pumps Completed
- PS-7 to be completed by VOW



- Widened 4 miles of C-1 Canal
- Installed temporary 220 cfs pump station



EAA RESERVOIR TEST CELLS

Contractor: Barnard Construction
Consultant CM: Black & Veatch
ERRA Construction Mgr: Rich Bartlett
ERRA Project Mgr: Shawn Waldeck

- Construction Start: Jan 12, 2005
- Final Completion: May 31, 2005
- Construction Contract: \$8.4 Million
- Utilized for EAA Reservoir construction



- Constructed to test/support embankment design
- Overwash test used to validate design configuration





C-43 WEST STORAGE RESERVOIR TEST CELLS

Contractor: Barnard Construction
Consultant CM: Stanley Consultants
ERRA Construction Mgr: Bruce Phillips
ERRA Project Mgr: LuAnn McVicker

- Construction Start: Jan 16, 2006
- Final Completion: April 16, 2007
- Construction Contract: \$10.0 Million



- Constructed and operated two temporary reservoir test cells
- 10 month seepage and water quality monitoring period





C-44 RESERVOIR & STA TEST CELLS

Contractor: Barnard Construction
Consultant CM: HDR, Inc.
ERRA Construction Mgr: Bruce Phillips
ERRA Project Mgr: Sue Ray

- Construction Start: Feb 16, 2006
- Substantial Completion I: May 31, 2007
- Final Completion: July 7, 2007
- Construction Contract: \$9.0 Million



- Constructed and operated two temporary reservoir test cells and two temporary storm water treatment areas
- 12 month monitoring period





C-44 TIWCD TEMPORARY RECONFIGURATION

Contractor: CAN Construction
Consultant CM: HDR, Inc.
ERRA Construction Mgr: Bruce Phillips
ERRA Project Mgr: Sue Ray

- Construction Start: Mar 14, 2007
- Final Completion: June 22, 2007
- Construction Contract: \$1.4 Million



- Consists of installing pumps and check structures to test proposed reconfiguration
- Installed new drainage culvert and replaced existing bridge





C-44 SITE PREPARATION - PHASE I

Contractor: Overland Construction
Consultant CM: HDR, Inc.
ERRA Construction Mgr: Bruce Phillips
ERRA Project Mgr: Sue Ray

- Construction Start: Jan 9, 2007
- Final Completion: May 18, 2007
- Construction Contract: \$0.5 Million



- Consists of removing and burning all citrus trees on 1590 acres
- First phase of site preparation for C-44 reservoir and STAs





C-44 SITE PREPARATION - PHASE II

Contractor: Running W Citrus L.P.
Consultant CM: HDR, Inc.
ERRA Construction Mgr: Bruce Phillips
ERRA Project Mgr: Sue Ray

- Construction Start: Mar 5, 2007
- Final Completion: Oct 1, 2007
- Construction Contract: \$3.9 Million
- As of Sept. 2007: 87% Complete



- Consists of removing and burning all citrus trees on 9,996 acres
- Second phase of site preparation for C-44 reservoir and STAs





MANATEE BARRIER INSTALLATION

Contractor: L.J. Clark Construction
ERRA Construction Mgr: Miguel Cruz
ERRA Project Mgr: Sean Williams

- Construction Start: Oct 31, 2006
- Final Completion: Jan 19, 2007
- Construction Contract: \$0.4 Million



- Expedited construction and installation schedule
- In-place and operational by Dec 30, 2006





PICAYUNE STRAND RESTORATION - DEMOLITION

Contractor: Cross Construction
ERRA Const Mgr: Brian Davidson
ERRA Project Mgr: Chip Eitel

- Construction Start: July 6, 2006
- Final Completion: May 24, 2007
- Construction Contract: \$1.5 Million



- Consists of complete structure demo and removal of 160 sites within area formerly known as Golden Gate Estates

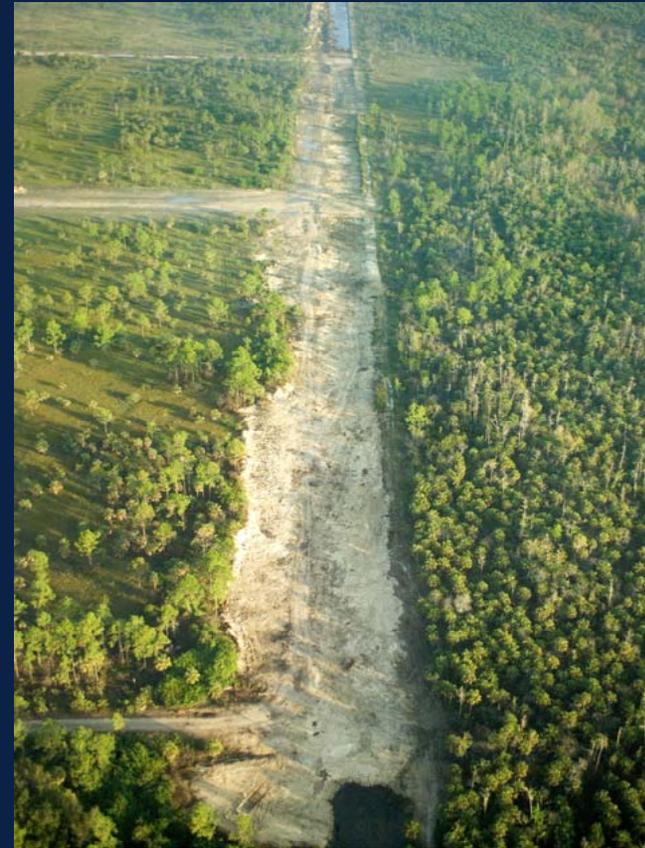




PICAYUNE STRAND RESTORATION PRAIRIE CANAL BACKFILLING

Contractor: Globetec Construction
ERRA Const Mgr: Brian Davidson
ERRA Project Mgr: Chip Eitel

- Construction Start: Aug 14, 2006
- Final Completion: June 10, 2007
- Construction Contract: \$2.2 Million



- Consists of partially backfilling approx. 5 miles of the Prairie Canal with 21 earthen plugs



PICAYUNE STRAND RESTORATION ROAD REMOVAL

*Contractor: American Earth Movers
ERRA Const Mgr: Brian Davidson
ERRA Project Mgr: Chip Eitel*

- Construction Start: Oct 30, 2006
- Final Completion: July 30, 2007
- Construction Contract: \$3.5 Million



- Consists of removing existing roadways between Prairie and Merritt Canals, clearing and grubbing, and level grading roadways





EAA RESERVOIR – SEEPAGE CANAL (GMP#1)

Contractor: Barnard – Parsons JV
Cons CM: Brown & Caldwell
ERRA Const Mgr: Will Wing
ERRA Project Mgr: Shawn Waldeck

- Construction Start: Aug 24, 2006
- Final Completion: Sept 17, 2007
- Construction Contract: \$53.7 Million



- Consists of the drilling, blasting and excavation of 3 miles of seepage canal, material stockpiling, muck removal and construction village infrastructure





EAA RESERVOIR – ROCK CRUSHING (GMP#2)

Contractor: Barnard – Parsons JV
Cons CM: Brown & Caldwell
ERRA Const Mgr: Will Wing
ERRA Project Mgr: Shawn Waldeck

- Construction Start: March 1, 2007
- Final Completion: May 9, 2010
- Construction Contract: \$112.7 Million
- As of Sept. 2007: 17% Complete



- Consists of the mobilization, setup, testing and operation of an aggregate processing plant capable of producing up to 5.35 million tons of material for use on the project





EAA RESERVOIR REMAINDER OF SEEPAGE CANAL (GMP#3)

Contractor: Barnard – Parsons JV
Cons CM: Brown & Caldwell
ERRA Const Mgr: Will Wing
ERRA Project Mgr: Shawn Waldeck

- Construction Start: April 27, 2007
- Final Completion: May 31, 2008
- Construction Contract: \$95.9 Million
- As of Sept. 2007: 59%



- Includes the excavation and stockpiling of the balance of the Seepage Canal and muck removal for the remainder of the Project





Challenges Due to Price Increases in Construction

- **Increases in the Cost of Materials**
 - The Material Price index for the period from the beginning of 2005 to the beginning of 2007 have increased 28%
- **Increases in the Cost of Fuels**
 - The Florida Department of Transportation Fuel Price Index indicates an increase in gasoline of 46% and diesel of 33% from 2005 to current prices.



Challenges Due to Price Increases in Construction

- **Market Demand is High, Increasing Construction Cost Inflation**
 - February 2007 Engineering News Record reported for Levee & Canal Projects an average construction increase of 64% for the past five (5) years.
 - Increases in construction costs impacted Miami International Airports North Terminal and other projects to nearly \$1 billion more than planned.
 - Florida's Department of Transportation (DOT) is focusing on bid competition, recently rejecting 54 contracts on which cumulative low bids came in 60% above the agency's estimates.
 - A growth management bill was recently passed in Florida, which added another \$1 billion to Florida DOT's usual program of approximately \$2.5 billion. Most of the additional money may end up being used to account for inflation instead of constructing more projects. In addition to the Florida DOT work there continues to be significant private development in Florida.



Upcoming Project Activities October 2007

- **C-43 West Storage Reservoir – Pre-Final (90%) Design (October 4)**
- **EAA Storage Reservoir A1 - Structures Pre-Final (90%) Design (October 8)**
- **C-111 Spreader Canal (Frog Pond Reservoir) Including 30% Design (October 12)**
- **C-43 – Pump procurement Plans and Specifications (October 15)**
- **EAA STA Compartment B Build-out - STA Preliminary (30%) Design Report Package (October 18)**
- **LOFT – Lakeside Ranch – Brady Ranch Pump Station Configuration (October 19)**
- **L-8 Reservoir – Temp pumps 100% Plans, Specifications, Calculations, Summary of Comments and Cost Opinion (October 19)**



Upcoming Project Activities November 2007

- **L-8 Reservoir – Permanent Facilities Draft Report /Conceptual Design & Site Selection (November 1)**
- **EAA Bolles Canal – Final Bolles Survey (November 14)**
- **BBCW – Deering Estates Pre-Final (90%) Design Review (November 19)**
- **LOFT - Lakeside Ranch Preliminary (30%) Design Modeling Report (November 22)**



DISCUSSION/QUESTIONS

