



Projects Update



Quarterly Meeting of the Technical Oversight Committee

May 22, 2007

Jeff Kivett, P.E.

South Florida Water Management District

**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



EAA Reservoir A-1



- Construction is underway
- ~\$250 Million under contract

**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



EAA Reservoir A-1



Seepage Canal – Phase 1 Construction



**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



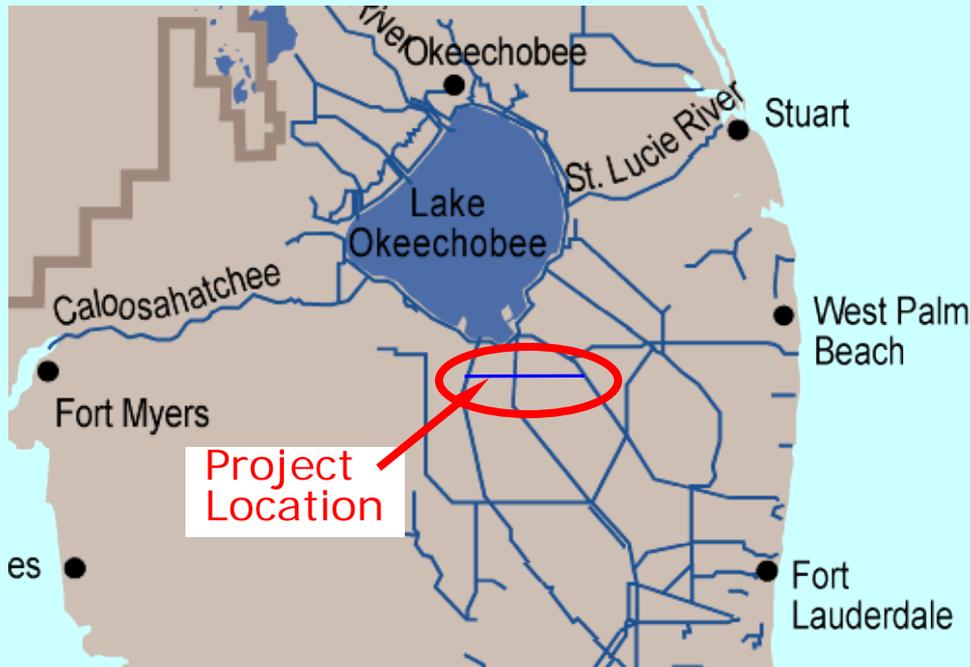
EAA Reservoir A-1



- Accomplishments to date:
 - Mobilization and 3 miles initial seepage canal 95% completed (GMP 1)
 - Commenced Rock Mining in preparation of aggregate production (GMP 2)
 - Commenced remaining work on seepage canal (GMP 3)
 - Initiated procurement process of pump equipment
- What's next:
 - Initiate negotiations for embankment construction (GMP 4)
 - Pre-purchase pumping equipment-initiated construction plans
- Challenges
 - 60 Day notice letter from NRDC – Challenging NEPA compliance of 404 permit



Bolles and Cross Canal Improvements



Accomplishments to date:

- Finalized Draft BODR
- Progressing through Technical Review

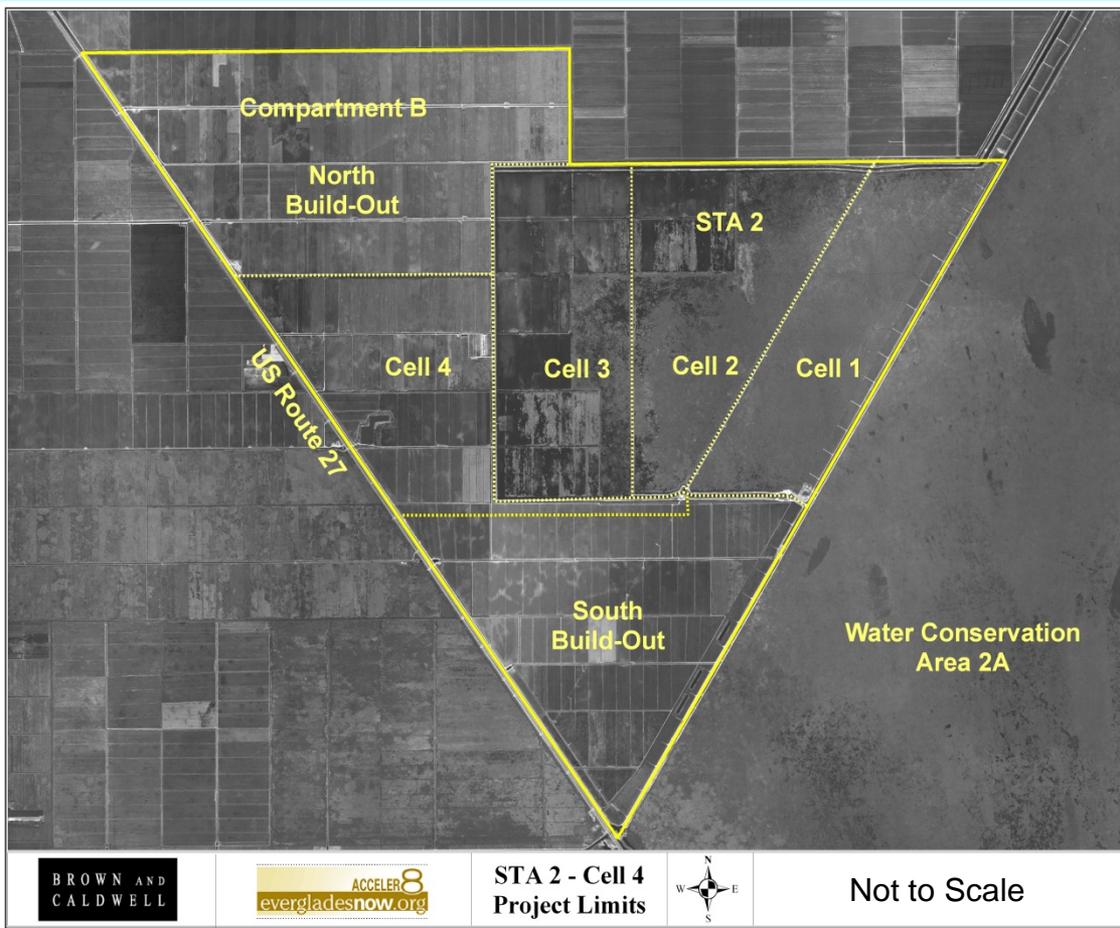
What's next:

- Preliminary Design
- Estimated Construction Completion- 2010/2011

**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



Compartment B STAs



Purpose: The development of additional Stormwater Treatment Area (STA) to further improve the quality of water discharging to the Everglades Protection Area (EPA) by assisting with the redistribution of flows and loads to the STA system.

Completed

- Phase 1 – Initial Expansion
- STA-2 Cell 4 (2,000 Acres)

Under Design

- Phase 2 - Build-out
- Compartment B Build-Out (7,500 Acres)

**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



Compartment B

STA-2 Cell 4



- **Design:**
 - April 2005 – Oct 2005
- **Construction Start:**
 - Jan 2006
- **Flow Capable:**
 - Nov 11, 2006
- **Final Completion:**
 - July 2007
- **Construction Contract:**
 - \$ 18.7 Million



**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



Compartment B

STA-2 Cell 4



STA 2

Print #70322004
Date:03/22/07



**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



Compartment B – Phase 2

Compartment B Build-out



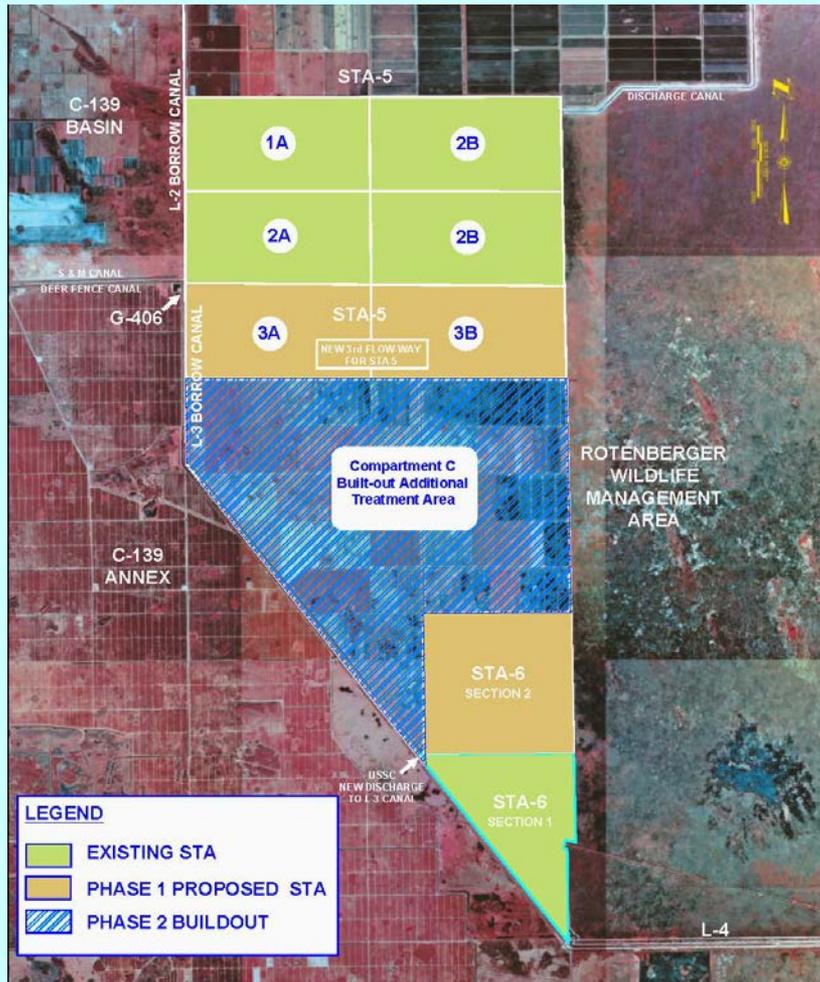
- **Accomplishments to date:**
 - **Completed preliminary survey work (topographic & boundary)**
 - **Completed preliminary geotechnical data collection**
 - **Completed Draft BODR**

- **What's next:**
 - **Complete Final BODR**
 - **Initiate Preliminary Design-Civil Works**
 - **Initiate Preliminary Design-Pump Stations**

- **Construction Completion**
 - **Civil Works 2010**
 - **Pump Stations 2011**



Compartment C STAs



Purpose: The development of additional Stormwater Treatment Area (STA) to further improve the quality of water discharging to the Everglades Protection Area (EPA) by assisting with the redistribution of flows and loads to the STA system.

Completed

- Phase 1 – Initial Expansion
- STA-5 Flow-way 3 (2,500 Acres)
- STA-6 Section 2 (1,400 Acres)

Under Design

- Phase 2 - Build-out
- Compartment C Build-Out (6,400 Acres)



Compartment C – Phase 1

STA-5 Flow-way 3



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



Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals



Compartment C – Phase 1 STA-5 Flow-way 3



**Everglades Protection Area Tributary Basins
Long-Term Plan for Achieving Water Quality Goals**



STA-6 Section 2



Design:

- Jan 2005 – Dec 2005

• Construction Start:

- Feb 2006

• Flow Capable:

- Dec 11, 2006

• Final Completion:

- July 2007

• Construction Contract:

- \$ 23.4 Million





STA-6 Section 2



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Compartment C – Phase 2

Compartment C Build-out



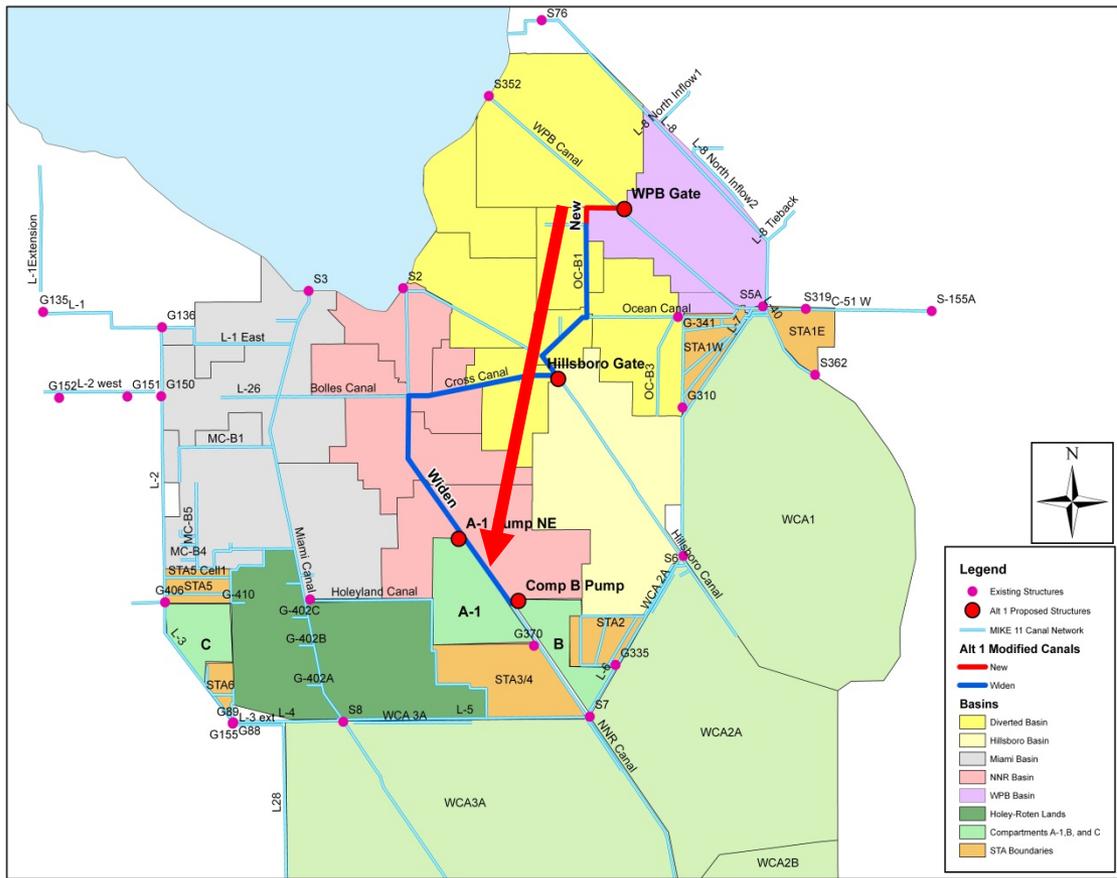
- **Accomplishments to date:**
 - **Completed preliminary survey work (topographic & boundary)**
 - **Completed preliminary geotechnical data collection**
 - **Completed Compartment C Watershed Hydraulic Study**
 - **Performing Basis of Design Report**
 - **Site investigations**
 - **Hydrologic & hydraulic analysis**
 - **Project layout & evaluation of alternatives**
 - **Conceptual project features design**
 - **Conceptual level opinion of probable cost**

- **What's next:**
 - **Complete BODR**
 - **Initiate Preliminary Design-Civil Works**
 - **Initiate Preliminary Design-Pump Station**

- **Construction Completion**
 - **Civil Works 2010**
 - **Pump Station 2011**



EAA Conveyance and Regional Treatment (ECART) Project



Project Purpose:
 Redistribution of flows and loads to optimize the performance of the existing and expanded STAs to improve water quality in the EPA

Project Location Map



EAA Conveyance and Regional Treatment (ECART) Project



Potential Project Components:

- ~ 40 Mi of Canal Work (2 Mi New/38 Mi Existing)
- New diversion structure in WPB Canal (L-10/12)
- New Sam Senter Extension Canal
- Expanding the existing Sam Senter Canal
- Expanding the Ocean/Cross Canal (L-13)
- Expanding the Hillsboro Canal (L-15)
- New diversion structure in the Hillsboro Canal
- Expanding the Bolles Canal (L-16 reach)
- Expanding the North New River Canal (L-18/19)



EAA Conveyance and Regional Treatment (ECART) Project



- Accomplishments to date:
 - Initiated Initial Design
 - Data Collection
 - Preliminary Evaluation Technical Memorandum
 - Initiated Preliminary Survey
 - Initiated Environmental Sampling SOW Development.
 - Initiated BODR SOW Development.
- What's next:
 - Perform Preliminary Geotechnical Services
 - Finalize BODR scope development



EAA Conveyance and Regional Treatment (ECART) Project



● Challenges:

- Movement of water 40 miles with a 4 foot change in elevation
 - Hydraulic Modeling
 - Sizing of the canals
- Existing infrastructure (Bridges, roads, utilities, etc...)
- Complete an Environmental Impact Statement and Obtain Permits
 - Historical canals
 - Cultural Resources
- Purchase of land for canal expansions
- Efficient Design is Based on knowing answers above



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Questions?

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