

A photograph of several green water lily leaves floating on a dark blue body of water. The leaves are reflected in the water below them.

Everglades Agricultural Area (EAA) A1 Flow Equalization Basin and Public Planning Process

Project and Lands Committee January 12, 2011

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Introduction

- Ongoing water quality litigation
 - United States v. Florida and South Florida Water Management District (Judge Moreno)
 - Miccosukee Tribe v. EPA (Judge Gold)
- SFWMD has demonstrated an ongoing commitment to water quality improvement and recognizes that there is more work to be done
- SFWMD would like to move ahead with an initial suite of additional water quality remedies within its current financial capabilities

Introduction (Cont.)

- To that end, the SFWMD is
 - Proposing a public planning process to initiate planning and design for this additional suite of water quality remedies
 - Contracting support to assist with and expedite planning and design for proposed remedies
 - Initiating the process to obtain funding via two mechanisms:
 - Revise the Long-Term Plan
 - Modify the Certificates of Participation (COPs) Master Lease Agreement to reallocate available funds to the EAA A1 Flow Equalization Basin (FEB) Project

Initial Suite of Water Quality Projects

- Objectives for initial suite of water quality projects:
 - Treatment performance consistent with water quality standards for the Everglades Protection Area
 - Can be implemented utilizing the available reserves
 - Can be implemented expeditiously to quickly obtain benefits
 - Capitalize on existing investment and available lands
 - Flexibility or multi-purpose
 - Provide valuable and transferable knowledge on treatment optimization, environmental response and enhancement opportunities

Flow Path Locations

Eastern Flow Path

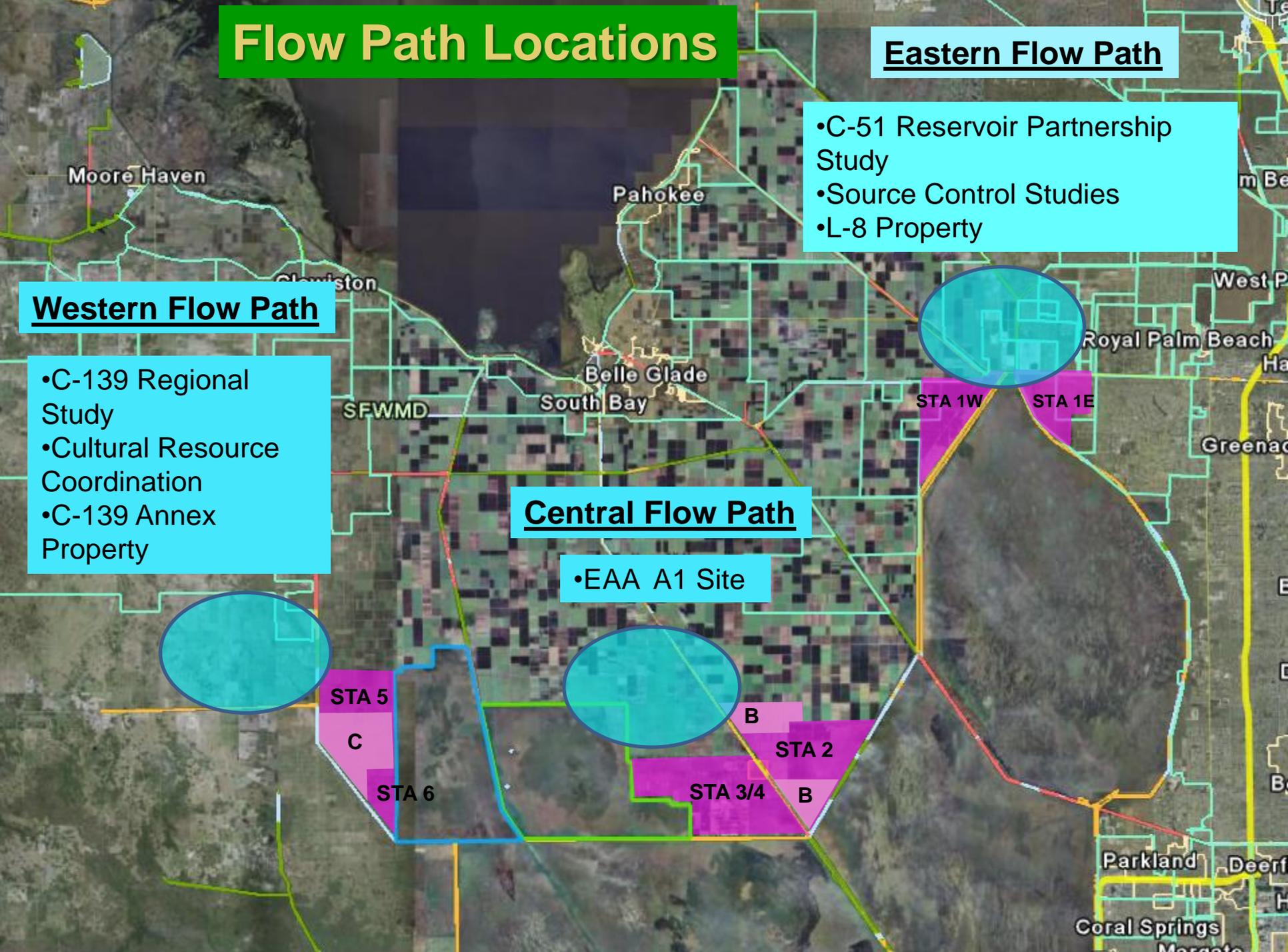
- C-51 Reservoir Partnership Study
- Source Control Studies
- L-8 Property

Western Flow Path

- C-139 Regional Study
- Cultural Resource Coordination
- C-139 Annex Property

Central Flow Path

- EAA A1 Site



EAA A1 Site

- Lands acquired
- Ideal location
 - Proximity to existing STAs and water management infrastructure
- Significant site work already completed
 - Can take advantage of previous investment
 - Known site conditions



Flow Equalization Basins

- Shallow storage (~4 ft) operated to capture and equalize stormwater flows prior to discharge into an STA
- Currently, the Stormwater Treatment Areas receive highly variable flows, however, these biological treatment systems prefer a more steady-state condition
- Adding a Flow Equalization Basin to the treatment train can provide more steady-state condition and thereby improve an STA's treatment capacity and performance

Use of A1 Site for a Flow Equalization Basin

Objectives for the initial suite of water quality projects:

- Treatment performance consistent with water quality standards for the Everglades Protection Area
 - ✓ Creates optimal treatment train in Central Flowpath in conjunction with STA-3/4 and STA-2/Compartment B
- Can be implemented utilizing the available \$70-80M
 - ✓ Estimated cost of \$70M
- Can be implemented expeditiously to quickly obtain benefits
 - ✓ Can be designed, constructed and operational in three to four years

Use of A1 Site for a Flow Equalization Basin (Cont.)

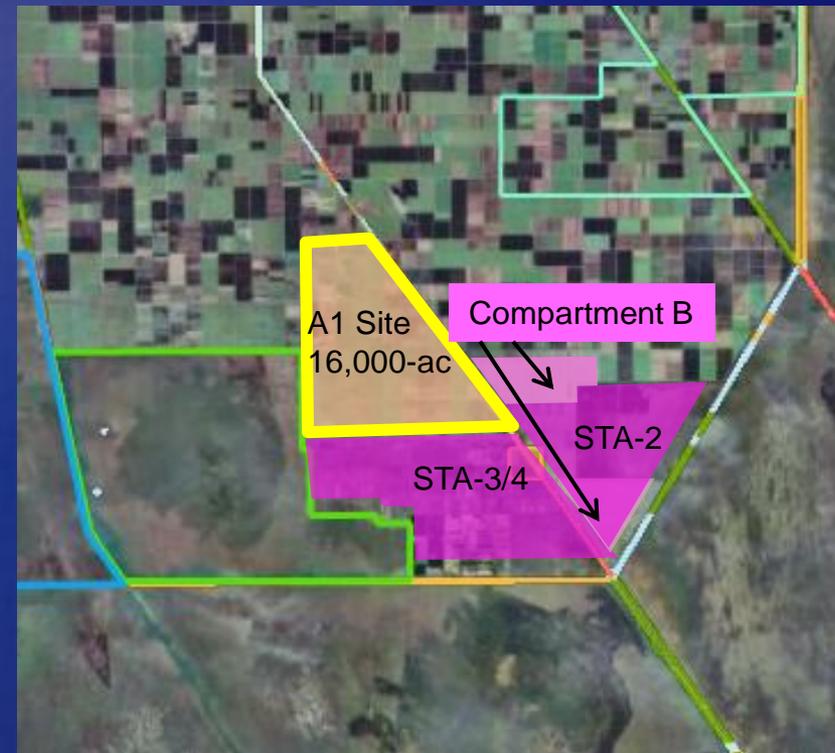
Objectives for the initial suite of water quality projects:

- Capitalize on existing investment and available lands
 - ✓ Uses existing work and investment for EAA Reservoir
- Flexibility or multi-purpose
 - ✓ FEB can be converted to future STA or deeper storage, if necessary
- Provide valuable and transferable knowledge
 - ✓ Opportunity to monitor FEB effectiveness for flow equalization and water quality treatment

EAA A1 Flow Equalization Basin

Propose moving forward expeditiously with a Flow Equalization Basin on the EAA A1 Land as a primary component of the initial suite of water quality projects

- Meets objectives
- Opportunity to obtain near-term benefits
- Identified as one of the initial projects in EPA's Amended Determination
- STA-3/4 has largest STA acreage in conjunction with A1, STA-2 and Comp. B; allows for largest treatment train



Public Planning Process

- Begin planning process immediately
 - Initiate public planning process at February WRAC meeting
 - Initial public planning process estimated as two to three-month process
 - Routine updates through WRAC as detailed planning, design and construction activities progress
- Will need to obtain appropriate Federal and State regulatory authorizations and land-use approvals
- Funding
 - Everglades (EFA) Trust Fund 406000 Reserves
 - COPS proceeds

EAA A1 February-March Schedule and Funding

- Everglades Forever Act
 - Will need to amend the Long-Term Plan
 - Public meetings
 - February WRAC meeting and February Long-Term Plan meeting
 - March GB for approval to submit modification request to FDEP
 - FDEP has 30 days to review
- COPs – subject to modifying Master Lease Agreement (pledging underlying land on EAA A1 site)



Questions