

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

8<sup>th</sup> Annual Public Meeting on the Long  
Term Plan for Achieving Water Quality  
Goals for Everglades Protection Area  
Tributary Basins  
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*Temperince Morgan, Director  
Policy and Coordination Department  
Everglades Restoration and Capital Projects*

# 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
  - Utilizing WRAC for 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

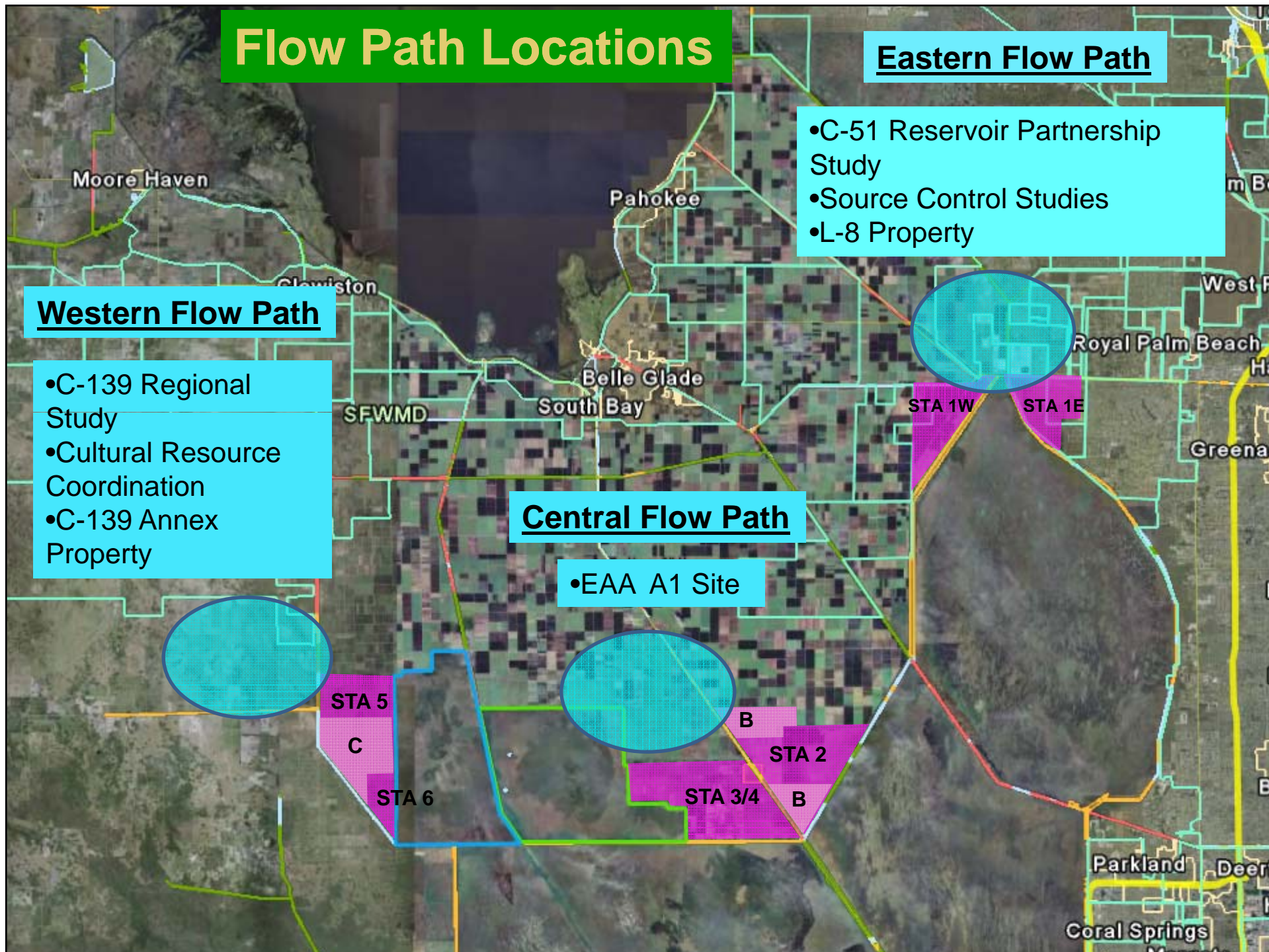
- C-51 Reservoir Partnership Study
- Source Control Studies
- L-8 Property

## Western Flow Path

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

## Central Flow Path

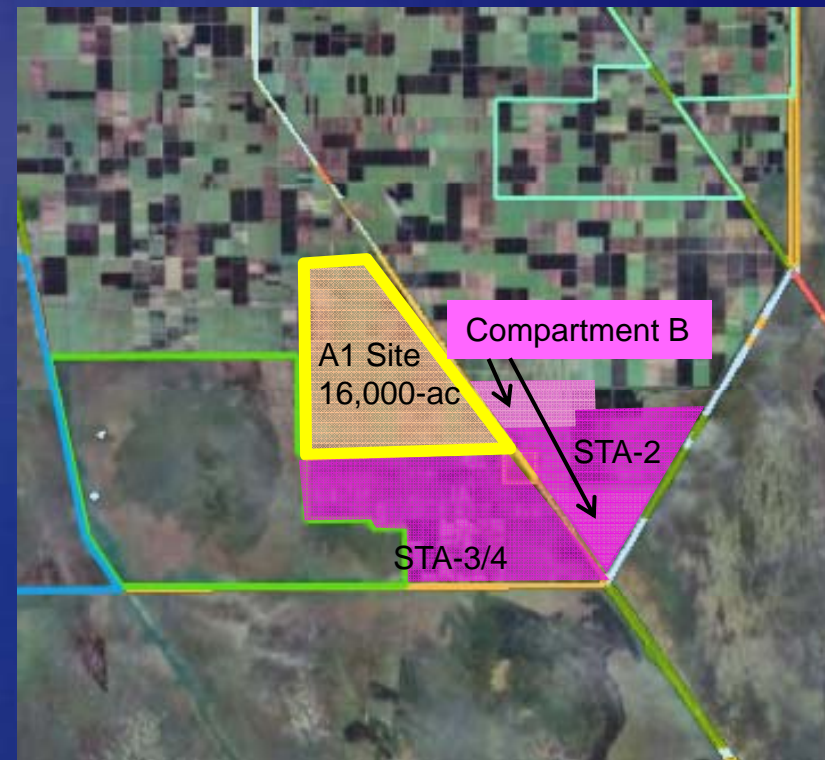
- EAA A1 Site





# 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 entering an STA
- Currently, the Stormwater Treatment Areas (STAs) receive highly variable flows, however, these biological treatment systems prefer a more steady-state condition
- Adding a Flow Equalization Basin to the treatment train is anticipated to 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.)

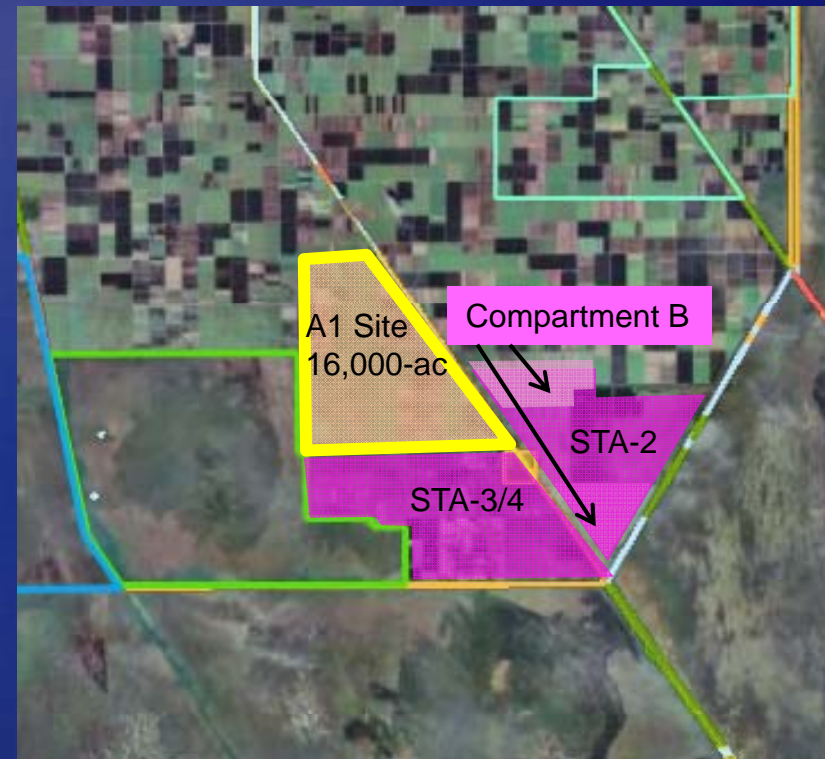
Objectives for the initial suite of water quality projects:

- 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

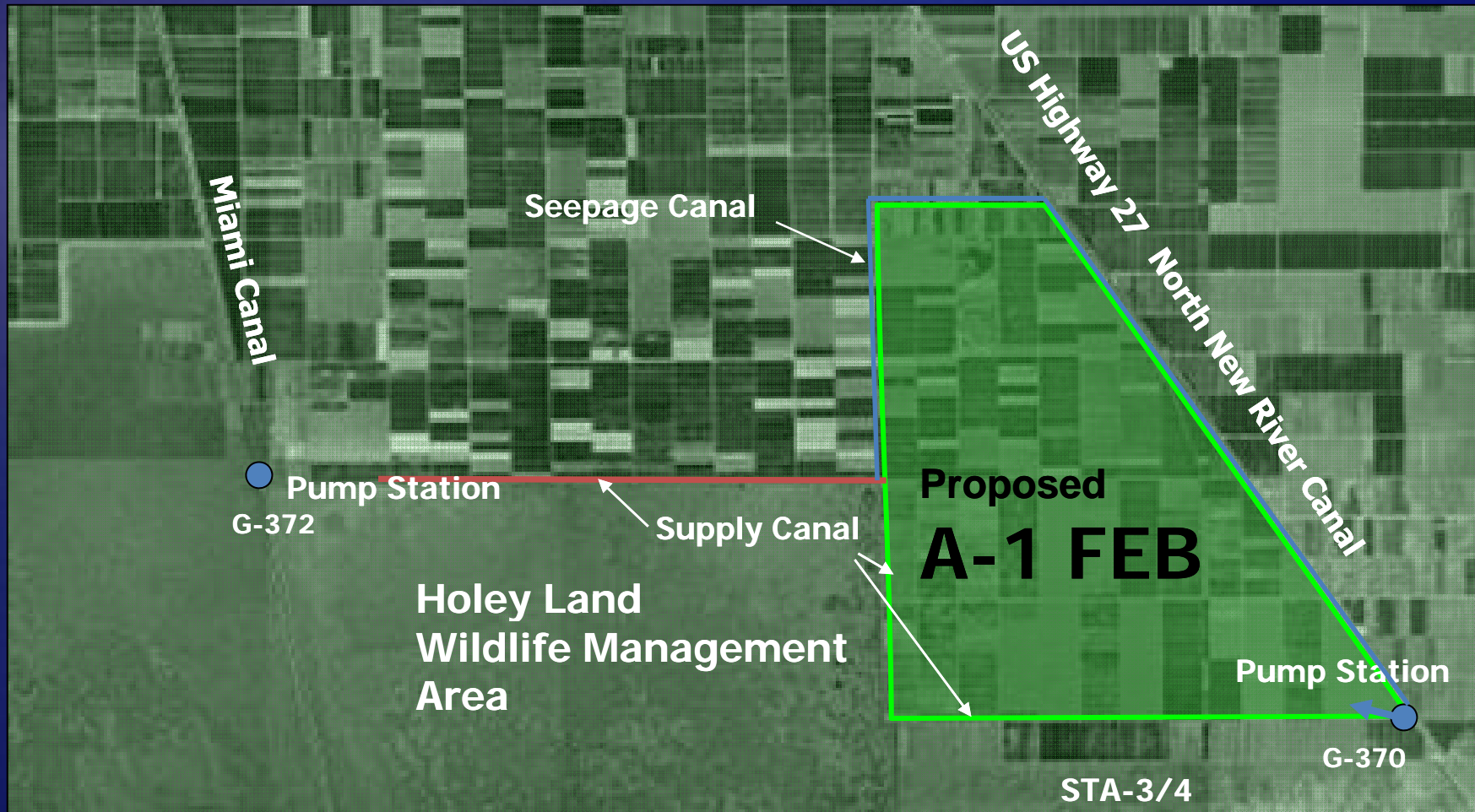
Propose moving forward expeditiously with a Flow Equalization Basin on the EAA A1 Land as a primary component of the initial suite of water quality projects

- 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





## EAA A-1 Flow Equalization Basin (FEB)

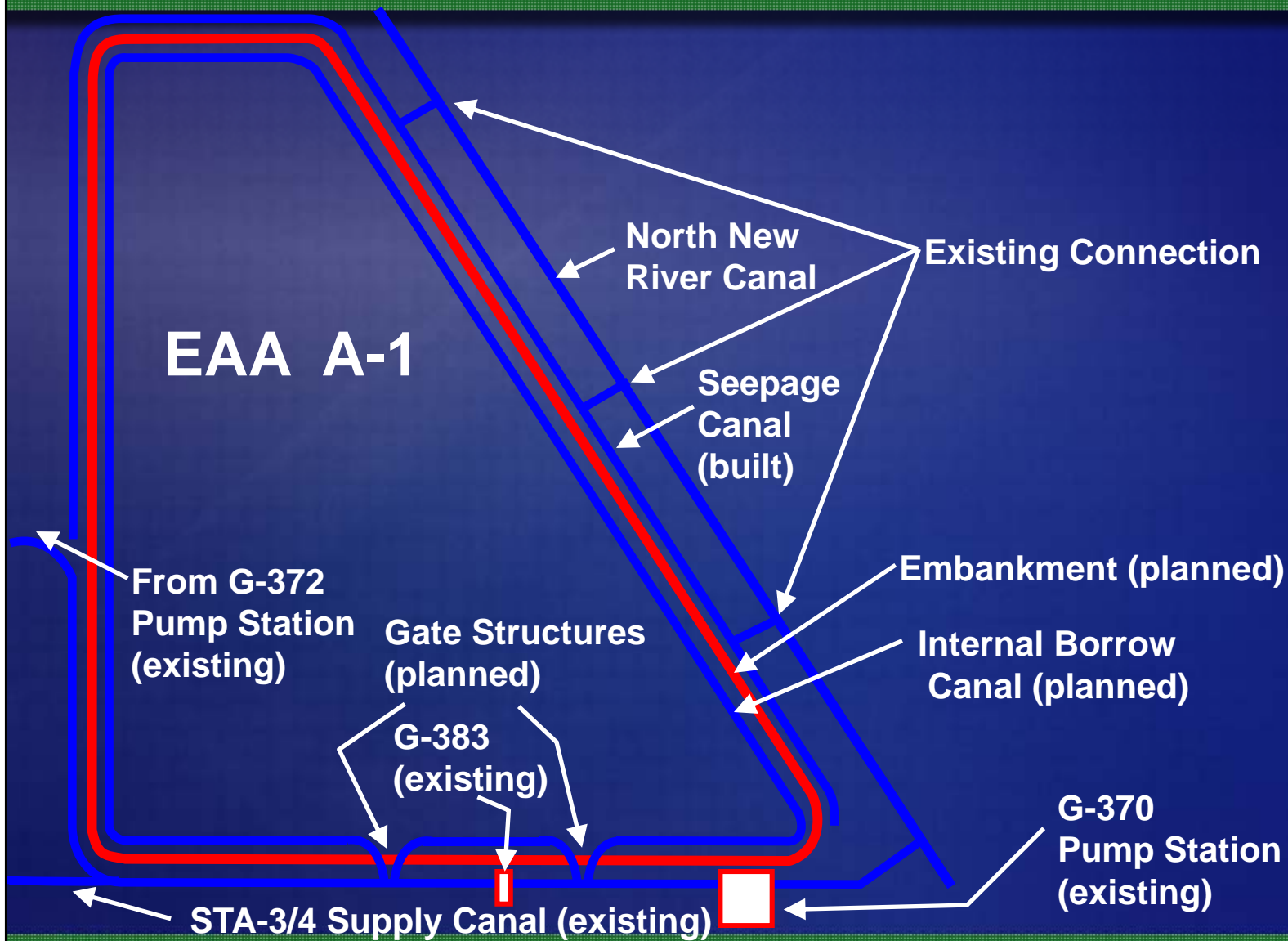


## EAA A-1 Flow Equalization Basin (FEB)





## EAA A-1 Flow Equalization Basin (FEB)



## EAA A-1 Flow Equalization Basin (FEB)

### ■ Project Schedule

- Complete Preliminary (30%) Design: September 2011
- Complete Intermediate (60%) Design: March 2012
- Complete 90% Design: September 2012
- Ready to Advertise Bid Package: January 2013
- Begin Construction: April 2013
- Construction Complete: January 2015

## Additional Projects Under Consideration

- Recommendations from the S-5A and C-51W/L-8 Water Quality Improvement Assessments
  - Preparing draft final reports to present to stakeholders for discussion and consideration
- Additional water quality improvement projects will be considered
  - Due to funding limitations, these will need to be prioritized

## Public Planning Process

- Initial public planning process estimated as two to three-month process utilizing WRAC
  - 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 (Everglades Forever Act) Trust Fund 406000 Reserves
  - COPS proceeds



## Schedule and Funding

- EFA/Long Term Plan Revision
  - March WRAC meeting
    - Additional discussion of the FEB and other projects
  - April 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