



# **BROWARD COUNTY WATER PRESERVE AREA PROJECTS**

## **Briefing to the Working Group**

**April 20, 2006**



# Briefing Purpose

- To advise the Working Group of the status of the Draft PIR/EIS currently out for public review.
- To provide a brief overview of the project, project milestones, costs and alternatives outlined in the Draft PIR/EIS.

# BCWPA Project Purpose

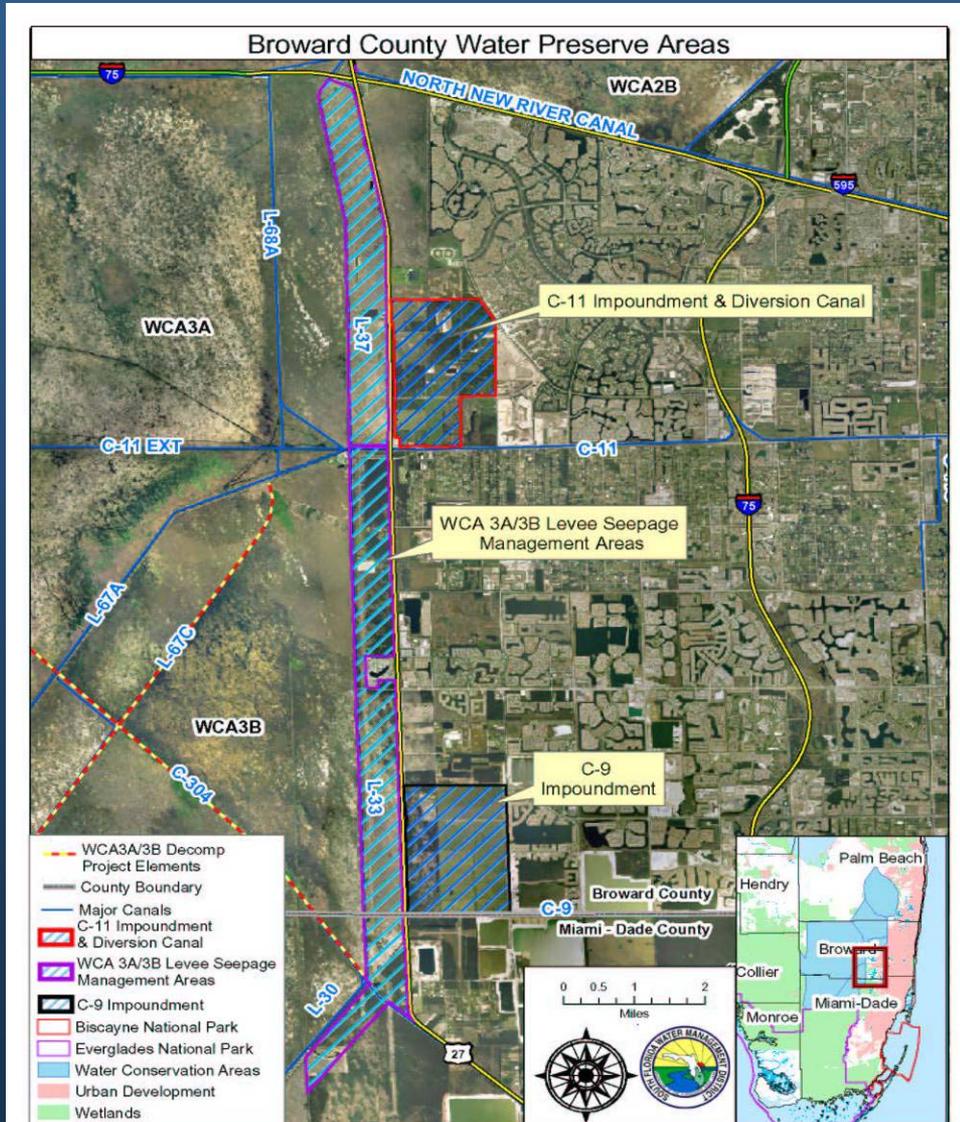


- Reducing undesirable losses from the natural system through seepage
- Capturing and redistributing stormwater runoff previously discharged to WCA 3



# Study Area

- Eastern reaches of Water Conservation Areas (3A and 3B)
- Village of Weston, Town of Davie, Cooper City, Miramar, Southwest Ranches and Pembroke Pines





# Status & Upcoming milestones

## PAST

- Draft Project Implementation Report/Environmental Impact Statement (PIR/EIS) out for public release: March 17, 2006

## PRESENT

- Team is updating PIR/EIS to current Guidance memo format.
- Team is responding to public comments that have been received.
- Public Meeting: April 18, 2006
- Stakeholders meeting: April 19, 2006
- Working Group briefing: April 20, 2006

## FUTURE

- Public comment period on D PIR/EIS closes: May 1, 2006
- Final PIR/EIS scheduled for completion: June 1, 2006
- Final PIR/EIS published in Federal Register: mid July 2006
- A8 construction start: Late August 2006



# Recommended Plan – Alternative A4

## The BC WPA Project includes the following features:

- C-9 Impoundment: 1,739 acres, 4 ft deep
- C-11 Impoundment: 1,695 acres
  - Northern Compartment "A" 1,490 acres, 4 ft deep
  - Southern Compartment "B" 205 acres, 2 ft deep
- Seepage management: buffer strip (4,312 ac), 3 structures
- North New River Channel Modifications from C-11 Impoundment to Seepage Management Area
- Recreation features of Recommended Plan
- Produces the greatest amount of NER benefits
- Cost effective and best buy after Cost Effectiveness/Incremental Cost Analysis (CE/ICA)



# Broward County, WPA Comparison of Alternatives

Alternatives for Broward Co, WPA were optimizations of the Restudy (D-13 R Alternative)

*Restudy (D-13 R) Alternative*

C-11: 1,600 acre impoundment @ 4' deep

C-9: 2,500 acre impoundment @ 4' deep

Seepage Management Area: levees, canals, divide structures



# Comparison/Optimization of Restudy Alternative

- Alt 2: Design attempt to solve seepage problems
  - C-9: 2,091 ac (divided into 3 compartments)
    - a) 1,232 ac @ 6' deep
    - b) 474 ac @ 2' deep
    - c) 385 ac @ 2' deep
  - C-11: 1,734 ac (divided into 2 compartments)
    - a) 1,119 ac @ 6' deep
    - b) 615 ac @ 2' deep
  - Seepage management: buffer strip, 3 structures, operations adjusted



# Broward County, WPA Comparison/Optimization of Restudy Alternative

- Alt 3: Design attempt to solve seepage problems
  - C-9: 2,091 ac
    - a) 1,232 ac @ 6' deep
    - b) 474 ac @ 4' deep
    - c) 385 ac @ 4' deep
  - C-11: 1,734 ac
    - a) 1,281 ac @ 6' deep
    - b) 453 ac @ 4' deep
  - Seepage management: buffer strip, 3 structures, operations adjusted



# Broward County, WPA Comparison of Alternatives

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*Restudy (D-13 R) Alternative*

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Seepage Management Area: levees, canals, divide structures



# Broward County, WPA Restudy vs. PIR

## Restudy Plan

(Oct 2005 price levels)

- Cost - \$405-million
- Features:
  - Reservoir Impoundments (C-9, and C-11)
  - Seepage Management Area

## PIR Plan

(Oct 2005 price levels)

- *Cost - \$520 mil (total sum of components)*
- Features:
  - Reservoir Impoundments (C-9, and C-11)
  - Seepage Management Area
  - North New River  
channel modifications (within Broward County WPA project limits)  
(initially authorized in WRDA 2000)



## **Broward County, WPA**

### **Why Alternative 4 was selected**

- **Results of Cost Effectiveness/ Incremental Cost Analysis: cost effective plan & best buy plan (efficiency) in accordance w/ Corps guidance (ER 1105-2-100).**
- **Lowest per unit cost of any alternative (for combined, normalized output).**
- **Fully meets Broward County, WPA planning objectives.**
- **Strong public & resource agency support (USFWS, FDEP, EPA, Broward County, Miami-Dade County).**



# **Project Costs – Recommended Plan**

## **BCWPA (Alternative A4)**

- **Pre-Construction Engineering Design (PED):** \$ 22,732,000
- **Real Estate:** \$281,526,000
- **Construction:** \$215,073,000
- ***Total:*** \$520,073,000
  
- ***Recreation:*** \$ 494,000



# Acceler8 Approach

- Develop PIR option using latest site data
- Optimize retained water depth comparing embankment height vs. seepage quantity
- Refine pumping quantities based on further modeling
- Include value engineering



# Questions?

