

South Florida Ecosystem Restoration Working Group (WG) and Science Coordination Group (SCG)

Consultation Workshop

Broward County Water Preserve Areas (BCWPA)

16 May 2012



Briefing Purpose

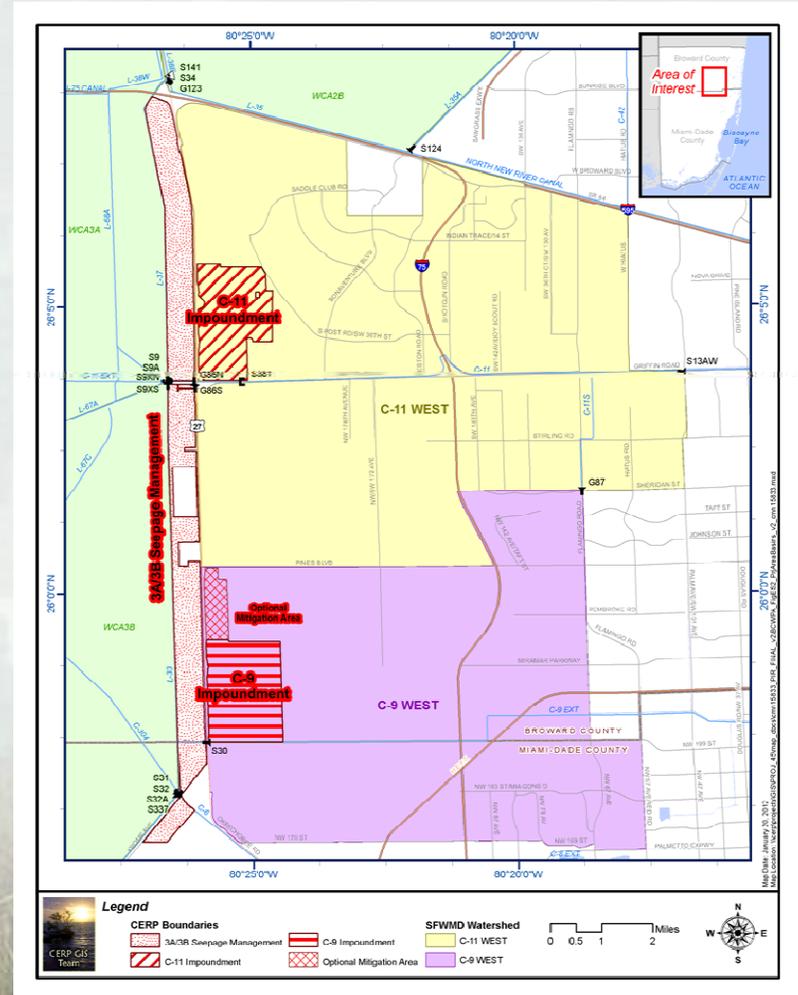
Pursuant to requirements of the Water Resource Development Acts of 1996, 2000 and the Programmatic Regulations (33 CFR 384 (2004), the Corps of Engineers and the non-Federal sponsor are responsible for consulting with and receiving recommendations from the Task Force throughout implementation of the CERP

- **1st Generation Projects – authorized and in construction (Site 1 Impoundment - Phase 1, Indian River Lagoon South, Picayune Strand; Melaleuca Eradication)**
- **2nd Generation Projects – up for authorization C-43 West Basin Storage Reservoir, C-111 Spreader Canal, Biscayne Bay Coastal Wetlands, and Broward County Water Preserve Areas**
 - ▶ **Consultation presentation on Broward County Water Preserve Areas Final Project Implementation Report – overview of final plan, status and next steps**



Project Objectives

- Reduce seepage loss from WCA 3
- Capture western C-11 basin stormwater and divert from WCA 3
- Improve hydroperiods and hydropatterns in WCA 3
- Restore habitat function in WCA 3
- Increase spatial extent
- Reduce nutrient loading to WCA 3
- Provide for aquifer recharge
- Manage salt water intrusion
- Assist estuary restoration



Overview of Selected Plan

Water Conservation Area 3A/3B Seepage Management Area (SMA)

- Hydraulic Ridge
- 4,353 Acres
- 18-inch depth

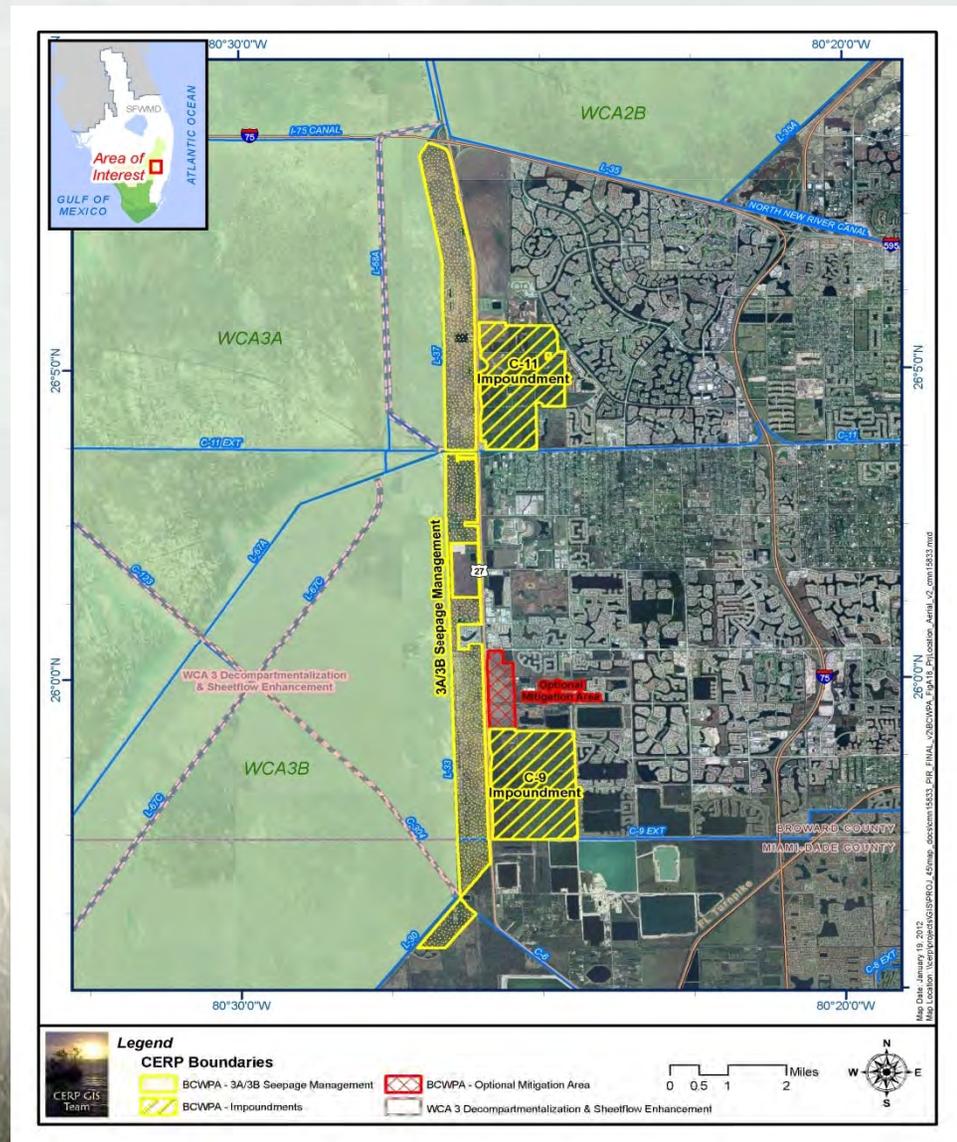
C-11 Impoundment

- 1,830 Acres
- 4.3-foot depth (1,068 Acres)
- Mitigation 488 Acres
- Unlined

C-9 Impoundment

- 1,807 Acres
- 4.3-foot depth (1,641 Acres)
- Mitigation 339 Acres
- Unlined

Total acreage = 7,990 Acres



Broward County Water Preserve Areas

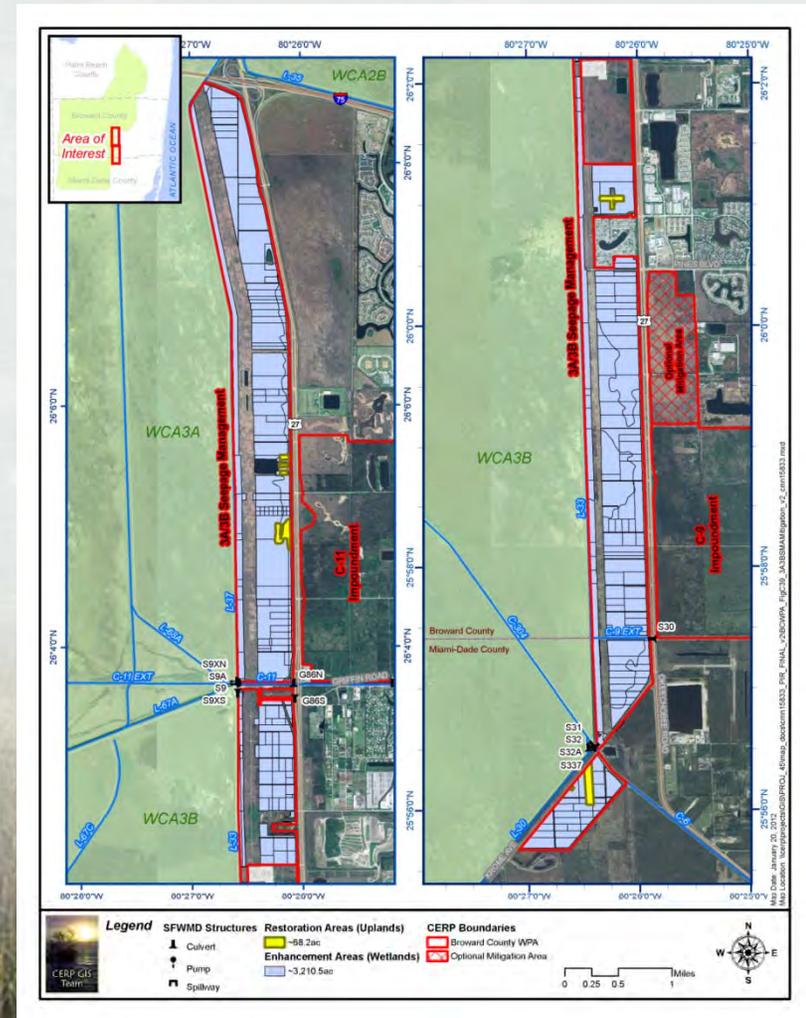
C-11 Impoundment

- 1,830-acre facility in C-11 Canal Basin, western Broward County
- 1,068 acres of water storage at a 4.3 ft. depth
- Mitigation areas include 475-acre buffer marsh along north end of project and 13-acre created marsh
- Intercepts and stores runoff from the western C-11 Basin that is currently pumped into WCA 3A
- Manages seepage losses, improves groundwater recharge
- Releases from the impoundment to C-11 canal during dry season recharge county wellfields, improve groundwater elevations in eastern C-11 Basin including water levels in Pond Apple Slough
- Recreational opportunities



Broward County Water Preserve Areas WCA 3A/3B Seepage Management Area

- 4,353-acre area with an 11-mile protective levee
- Levees, canals, water control structures allow depths to 18 inches
- Creates hydraulic ridge to reduce seepage out of WCA 3A/3B
- Maintains longer inundation periods in Everglades marshes
- Improves hydropatterns for fish and wildlife within the Seepage Management Area
- Provides conveyance to C-9 Impoundment
- Recreational facilities: 13 miles of improved surface for jogging/bike riding



Broward County Water Preserve Areas C-9 Impoundment

- 1,807 acres in southwest Broward County
- 1,641 acres of water storage at a 4.3 ft. depth
- Collects and stores runoff from C-9 Basin
- Adds to storage available for runoff diverted from C-11 Basin
- Boosts control of seepage losses from WCA 3B
- Enhances groundwater recharge within the basin
- Recreational opportunities



Broward County Water Preserve Areas Recreational Opportunities

- State of Florida study identified unmet needs for natural, resource-based recreation facilities
- Project recreation features include biking, horseback riding, hiking, wildlife viewing, nature study, fishing and canoeing activities
- Looped nature trails are part of C-11 Impoundment (9 miles) and C-9 Impoundment (7 miles)
- Broward County and SFWMD to share the operation and maintenance of the 13-mile trail planned for the WCA 3A/3B Seepage Management Area



Project Benefits

- Restores habitat function of WCA 3 by improving hydroperiods and hydropatterns
- Retains water in the Everglades by reducing seepage out of WCA 3
- Reduces nutrient loading to WCA 3
- Increases spatial extent of wetlands function
- Provides recreational opportunities



Recommended Plan Costs

Item	Total
Planning, Engineering, and Design (PED)	\$ 56,396,000
Construction Management	\$ 29,612,000
Lands, Easements, Relocations & Right-of-ways (LER&R)	\$ 401,251,000
Construction (Ecosystem Restoration)	\$ 373,002,000
Recreation	\$ 6,446,000
Total Project Cost	\$ 866,707,000
Annual Monitoring (Water Quality + Mitigation)	\$ 480,000
Annual Operations, Maintenance, Repair, Rehabilitation & Replacement (OMRR&R) (includes Recreation)	\$ 3,442,000



Estimated Project Timeline

