



Water Reservation for the Biscayne Bay Coastal Wetlands Phase I CERP Project

Governing Board Meeting – March 14, 2013

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Presentation Overview

- Governing Board direction
- Rule Development Activities
- Identification of water to be reserved
- Regulated water bodies
- Key public comment and response
- Recommended Action



Governing Board Direction

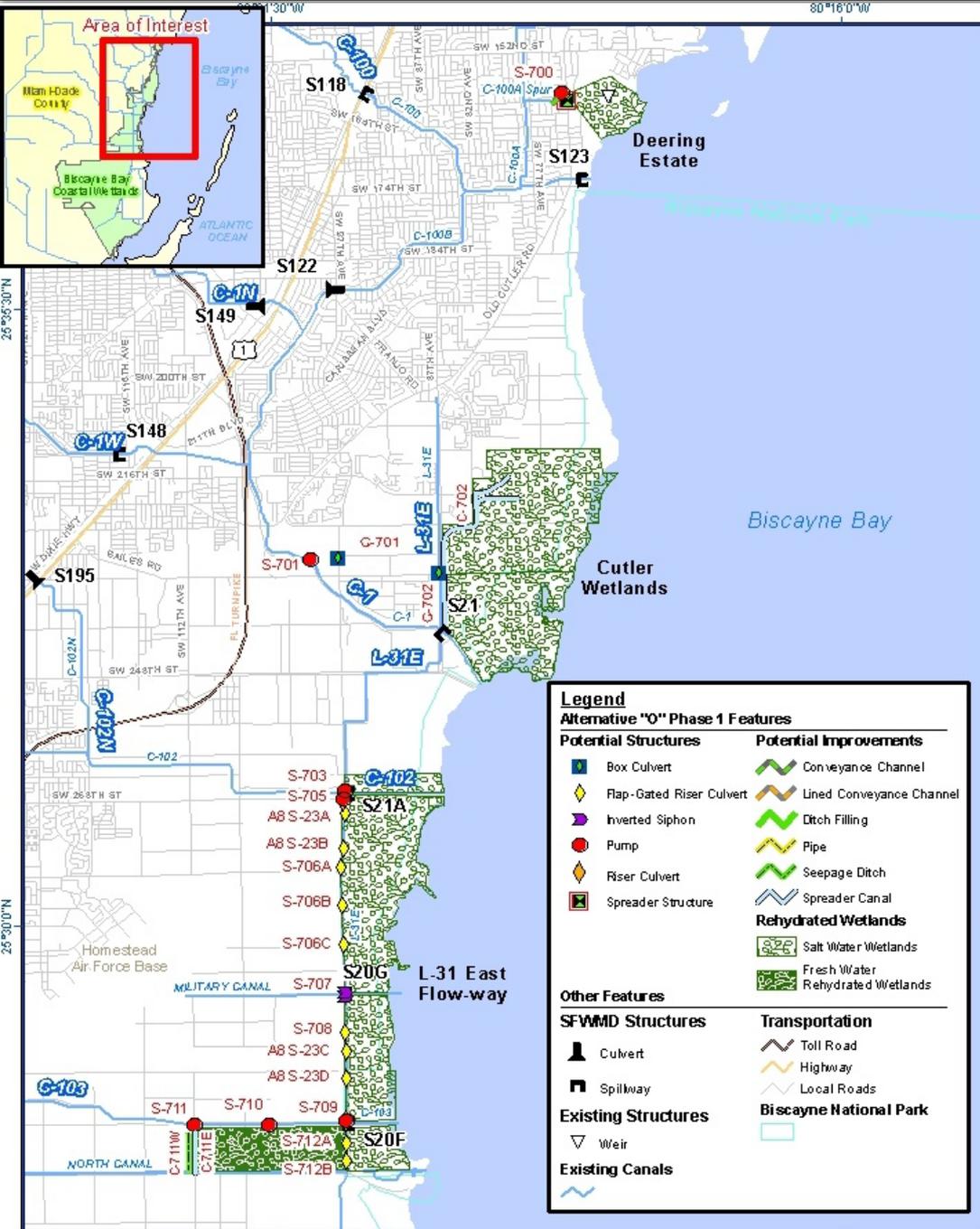
- Staff directed to focus reservation rule on protection of water for the CERP BBCW (Phase 1) project
 - Project Implementation Report (PIR) identified surface water flows
 - Reserve water consistent with PIR
- Reservation is a critical path step to obtain federal funding



Rule Development Process

BBCW (Ph. 1) Activity	Date
WRAC and Governing Board Meeting - Briefing for Proposed Rulemaking	November, 2011
Governing Board Direction on Scope of Reservation	December, 2011
Public Workshops	March/April, 2012
Technical Report Posted	October, 2012
Public Workshop	November, 2012
Public Comment Due Date	December 15, 2012
Revised Draft Rule Language	January 7, 2013
WRAC Meeting	February 7, 2013
Governing Board Meeting - Notice of Proposed Rule	March 14, 2013





Overview of CERP Biscayne Bay Coastal Wetlands Project-Phase 1

Legend

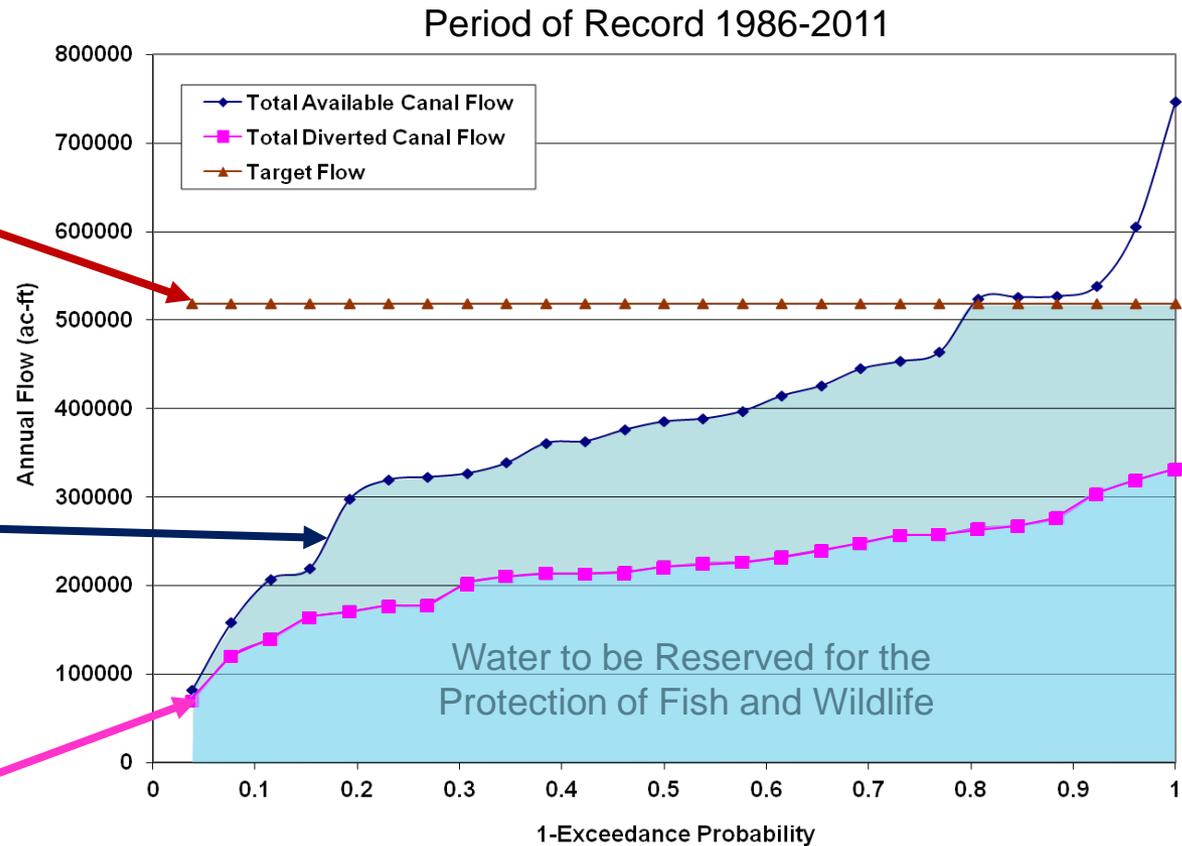
Alternative "O" Phase 1 Features

Potential Structures	Potential Improvements
Box Culvert	Conveyance Channel
Flap-Gated Riser Culvert	Lined Conveyance Channel
Inverted Siphon	Ditch Filling
Pump	Pipe
Riser Culvert	Seepage Ditch
Spreader Structure	Spreader Canal
	Rehydrated Wetlands
	Salt Water Wetlands
	Fresh Water
	Rehydrated Wetlands

Other Features	Transportation
SFWMD Structures	Toll Road
Culvert	Highway
Spillway	Local Roads
Existing Structures	Biscayne National Park
Weir	
Existing Canals	

Identification of Water to be Reserved

- PIR based near shore habitat target (518,759 acft)
- Total annual flows (1986-2011) thru S-123, S-21, S-21A, S-20G, and S-20F ranked by volume (81,798-747,338 acft)
- PIR estimated volumes of water to be diverted into wetlands (69,485-331,599 acft)



Draft Rule Components

- Chapter 40E -10, F.A.C – “Water Reservations”
 - Water reservations organized by geographic area
 - Where is the protected water?
 - *Identifies and describes reservation water bodies*
 - *Identifies the volume and seasonality of reserved water*
- Basis of Review for Water Use Permit Applications within the South Florida Water Management District
 - How much water is protected?
 - *Contains specific implementation criteria for the consumptive use permitting process*



Proposed Rule – CUP Review Criteria

- Prohibition on surface water withdrawals from Nearshore Central Biscayne Bay
- Restrictions on surface water withdrawals from canals contributing water needed for fish and wildlife protection
- Rule identifies specific withdrawals that do not use reserved water:
 - Groundwater withdrawals
 - Dewatering
 - Withdrawals of water in excess of the target identified in the volume probability curves found in 40E-10



Proposed Rule – CUP Review Criteria (Cont.)

- Rule identifies specific withdrawals that do not use reserved water:
 - Three (3) permits (small volumes) have been identified that will be subject to the following conditions
 - Renewals of existing permits withdrawing surface water from identified canal reaches as of rule adoption date
 - Permit modifications that do not increase the amount or timing of an existing permitted withdrawal from an identified canal reach
 - Water from terminated/reduced permits may be allocated so long as new allocation occurs upstream of the same coastal structure



Key Public Comment: Groundwater Protection

- **Concern:** Future groundwater withdrawals will induce seepage from protected canal reaches and reduce reserved flows to the Bay
- **Issue:** Should all groundwater use in Biscayne Bay Coastal Wetlands project area (south of C-4 canal) be restricted?
- **Response:** Existing consumptive use permitting criteria adequately constrain significant increases in groundwater use
 - Restricted Allocation Area Rule
 - Wetland Protection Rule
 - Saltwater Intrusion Rule

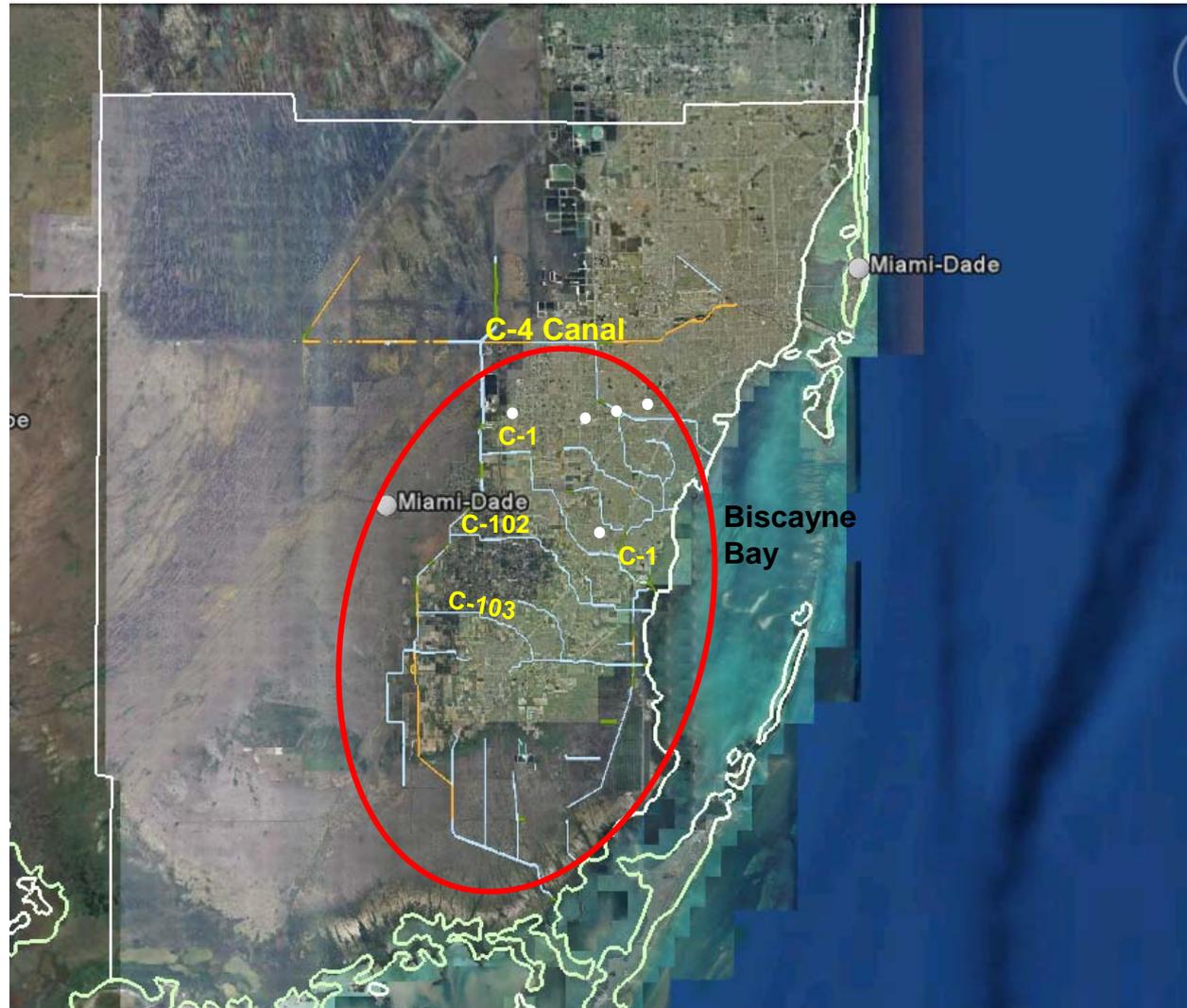


Groundwater Protection

- **Response con't:** Minimal increased projections in groundwater use south of the C-4 canal
 - Analyze existing and future water use demand in area south of the C-4 Canal
 - Analyze flows to coastal structures utilizing the 2 X 2 model



Evaluation Area South of the C-4 Canal



Groundwater Protection Demand Projection Results

Change in Future Demand between 2010 and 2030 for areas South of C-4 Canal

Water Use Category	Change in Volume (MGD)	Percent Change
PWS – Existing Legal Users	28.4*	15.4*
Golf Course	0.00	0
Industrial & Residential Self Supplied	-0.62	-11.3
Urban Landscape	2.59	3.2
Agricultural	-0.36	-1
Recreational/Landscape	0.36	2.3
Future New Demand – “Unpermitted”	2.0	

*PWS -Water Already Permitted (Southwest & Snapper Creek wellfields)

Groundwater Protection Flows to Coastal Structures

- Modeling used to compare current and future flows to Biscayne Bay
- Current and future regional operations unchanged
- Only consumptive use demands changed
- Results show minimal changes at two structures when flows are below the target
 - S-123 Showed a decrease 2.7 cfs
 - S-21 Showed a decrease of 4.3 cfs
- Potential reductions too small to affect Bay's salinity
- Technical Document will be appended to include this additional analysis on groundwater
- The LEC water supply plan will include a description of this water reservation



Next Steps



BBCW (Ph. 1) Activity	Date
Governing Board Meeting - Notice of Proposed Rule	March 14, 2013
Request Review by Office of Fiscal Accountability and Regulatory Reform	March 2013
Publish Proposed Rule in Florida Administrative Register	March 2013
Comment Period	March/April 2013
Rule Adoption/Public Hearing	May 2013
Rule Becomes Effective 20 days after filing with Dep't of State	July 2013

Recommended Action

- Authorize Publication of Notice of Proposed Rule in the Florida Administrative Register to amend Rules 40E-2.091, 40E-10.021, 40E-10.031, 40E-10.041, and add Rule 40E-10.061, F.A.C., to establish a water reservation and criteria for the CERP Biscayne Bay Coastal Wetlands Project (Phase I), and request review by the Office of Fiscal Accountability and Regulatory Reform.





Questions?

**Water Reservation for the Biscayne Bay Coastal
Wetlands Phase I CERP Project**