



# **South Miami-Dade Water Issues Coordination Update**

## **SFWMD Governing Board Workshop September 8, 2010**

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Everglades Restoration and Capital Projects

# Background

- SFWMD Activities in South Miami-Dade County
  - Ecosystem restoration
    - Everglades
    - Florida and Biscayne bays
  - Operations/water resource infrastructure
    - Water management system operations/maintenance
    - Alternative water supply development
  - Regulatory framework to protect water supply and the natural system

## Background (cont.)

- Successful implementation of these objectives positively affects the community
  - Jobs
  - Sustainable industry
    - Tourism
    - Agriculture
    - Business enterprise
  - Quality of life



# Is the District working effectively?

- Multiple projects create potential for unintended consequences
  - Are we sure our projects are not conflicting with each other or with local interests?
  - Are we fully engaging local stakeholders and local governments effectively in our project planning?
  - Is our science being applied in a focused manner to help prevent unintended consequences?
  - Are we missing key opportunities to partner on local projects?

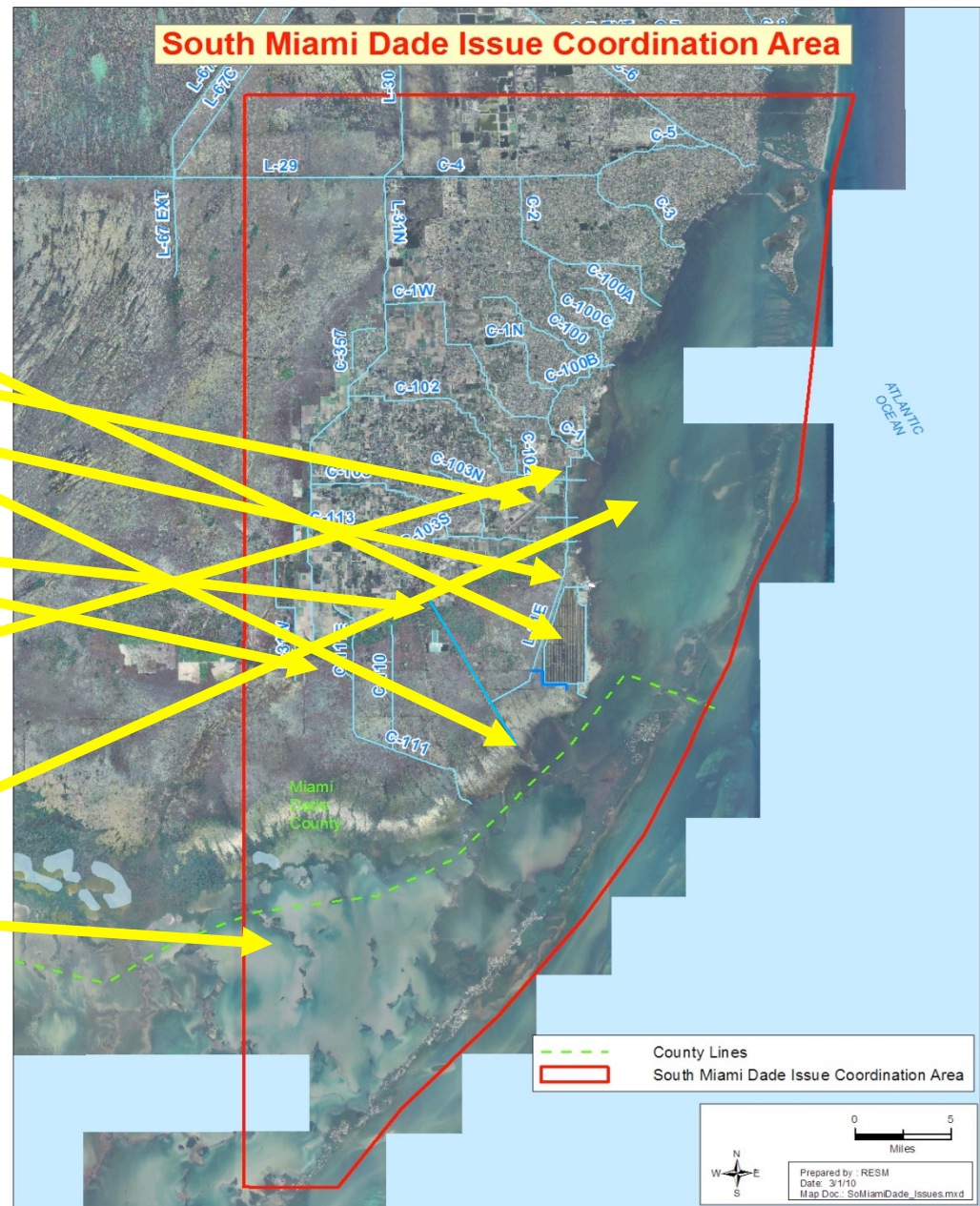
# Water Issues Coordination, a New Approach

- Established by SFWMD Executive Office in February 2010
- Provides oversight and coordination to multiple south Miami-Dade projects
- Coordinator identifies issues, potential conflicts and resource needs
- Develops solution options for senior management action
- Works with project managers
- Reports to senior management oversight team and to the SFWMD Deputy Executive Director



## Water Issues Coordination Projects

- FPL Turkey Point
- Seasonal Drawdown
- Water Control Structures
- Rock Mining
- C-111 West Spreader Canal
- Biscayne Bay Coastal Wetlands
- Biscayne Bay Rulemaking
- Florida Bay Research
- South MD Outreach
- Regulatory Compliance
- Litigation Support



# Progress

- FPL 5<sup>th</sup> Supplemental Agreement
  - Monitor network implementation
  - Quality Assurance project plan
  - Data production
  - Public access to data provided by SFWMD web page
- FPL Unit 6 and 7 Site Certification Application
  - Transmission lines/linear features
  - Power plant construction/operation



## Progress (cont.)

- Rock Mining Impact Evaluations
  - Atlantic Civil technical support in permit issuance
- CERP Projects
  - Construction under way
  - Monitoring; funding issues
- Regulatory Compliance
  - Staffing enhancements
  - Compliance tracking system



## Progress (cont.)

- Biscayne Bay Water Resource Rule Development
  - Protect existing surface water flow to Bay
  - Groundwater protected by existing rules/permits
- South Miami-Dade Outreach
  - Web page
  - Stakeholder meetings, interagency coordination
- Water Control Structures
  - FPL structure completed; MD DERM project permitted
  - MD DERM preliminary design FL. Cities Canal structure

## Progress (cont.)

- Seasonal Drawdown Operations
  - 2010 operations moderated
  - Data analysis; impacts of the operations
    - Preliminary results
    - Broad scale analysis in December 2010

# SFWMD Seasonal Operations

## **What:**

Seasonal lowering of gate elevations at water control structures S-21A, S-20F and S-179 up to 0.8 foot lower range, if needed, based on field conditions for planting and harvesting

## **Where:**

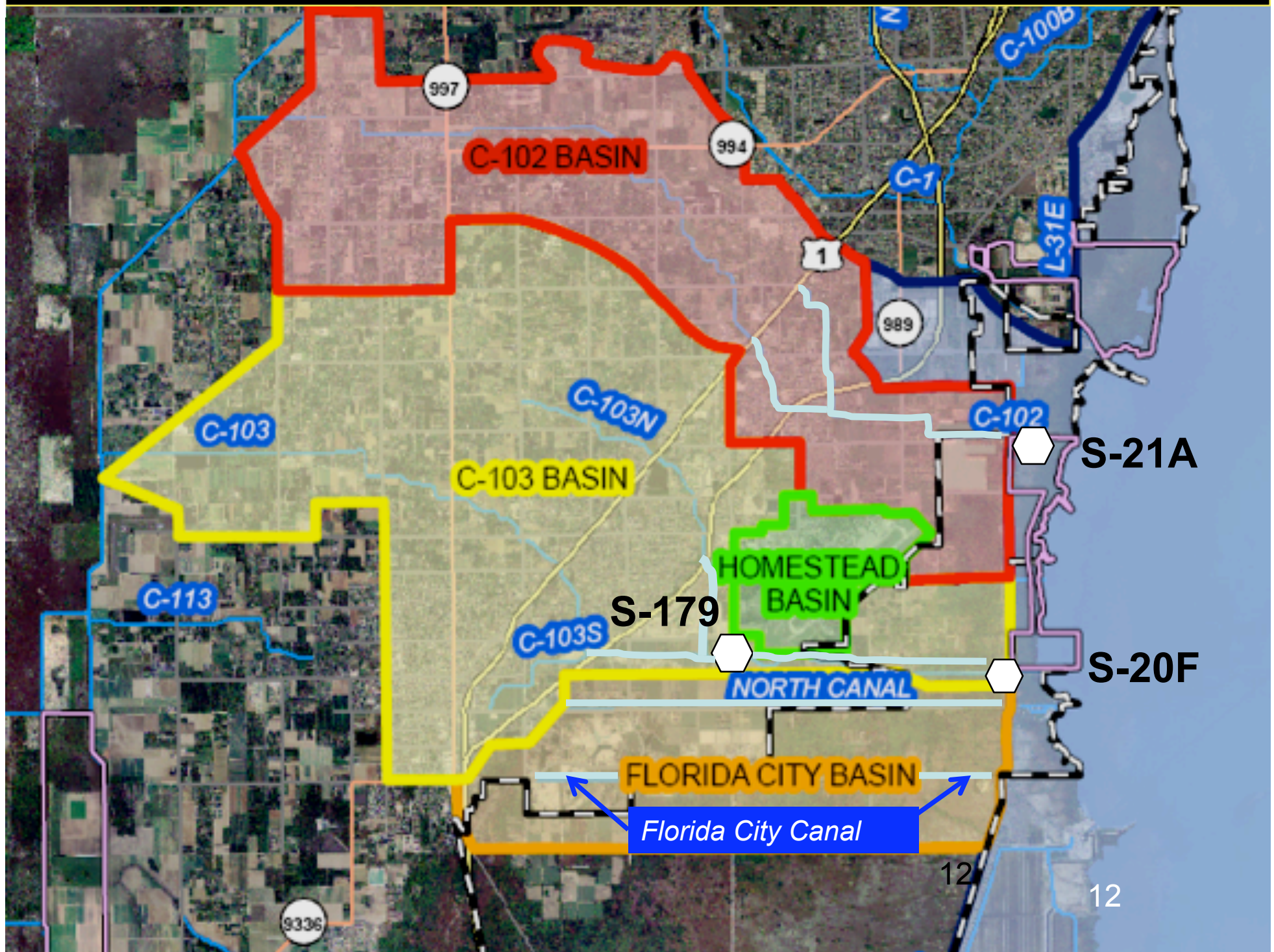
C-102, C-103, Florida City Canal, Homestead and North Canal basins

## **When:**

October 15<sup>th</sup> through April 30<sup>th</sup> based on field conditions



## SFWMD Structures and Basins with Operations





# Structures with Seasonal Agricultural Operations



## Canal Water Level Ranges (NGVD29) for Opening and Closing Gates

| Structure | High<br>April 30 - Oct 15 | Intermediate<br>Dec 30 - April 30 | Low<br>Oct 15 – Dec 30   |
|-----------|---------------------------|-----------------------------------|--------------------------|
| S-21A     | 2.2'-1.8'                 | 1.8'-1.4'                         | 1.4'-1.0'                |
| S-20F     | 2.2'-1.8'                 | 1.7'-1.3'                         | 1.4'-1.0'                |
| S-179     | 3.9'-3.1'                 |                                   | 3.1'-2.7' <sup>(1)</sup> |

<sup>(1)</sup> Oct 15 - Nov 15 ( and wet conditions if needed to end of April)

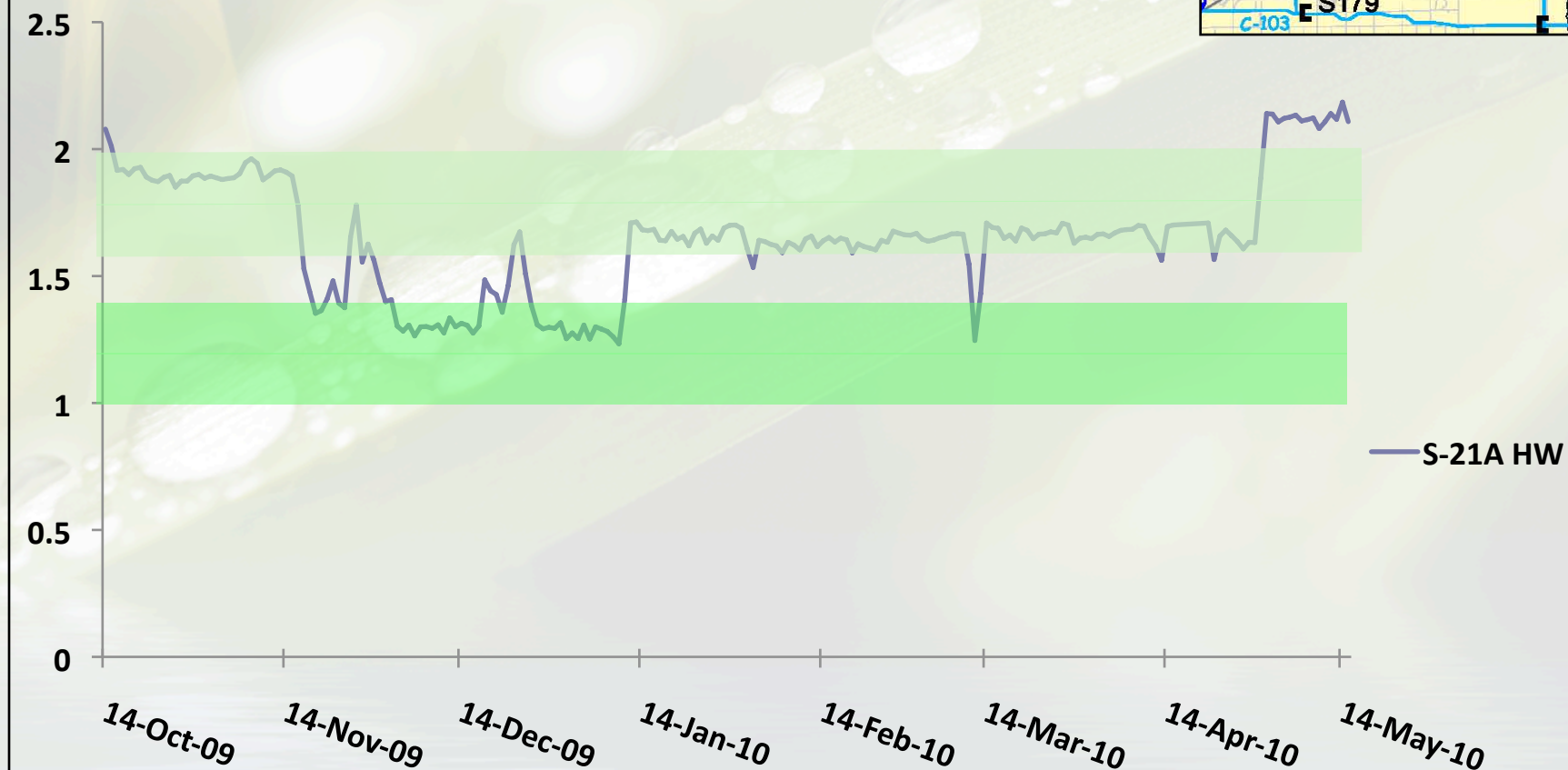
# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

C-102 (S-21A) Interim Range = Open at 2.0 Close at 1.6'

C-102 (S-21A) Low Range = Open at 1.4' Close at 1.0'



## S-21A Headwater

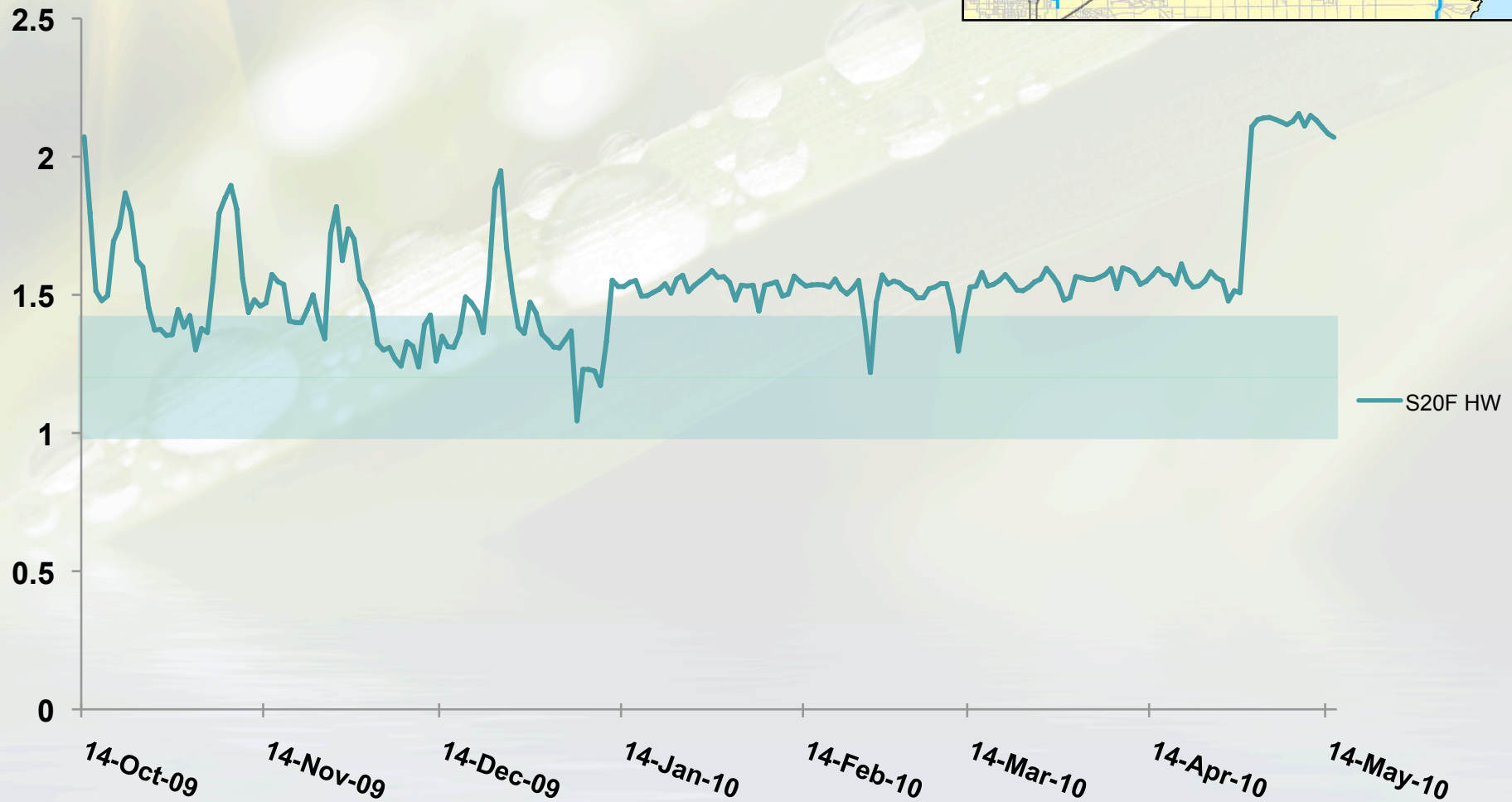




# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

C-103 Low Range (S-20F) = Open at 1.4' Close at 1.0'

S20F HW



## What's coming next

- September 29<sup>th</sup>; Stakeholder Round Table Discussion; Homestead, Florida
  - FPL Turkey Point Power Plant
  - Biscayne Bay Water Resource Protection Rulemaking
  - Seasonal Drawdown
  - South Miami-Dade Rock Mining
- October Governing Board
  - Seasonal drawdown proposed operations



**Questions?**



## Water Issues Coordination - Projects

- FPL Turkey Point Fifth Supplemental Agreement
- FPL Unit 6 and 7 Site Certification Application
- Seasonal Drawdown Operations
- Card Sound/Florida Cities Water Control Structures
- Rock Mining Impact Evaluations
- C-111 West Spreader Canal CERP Project

## Water Issues Coordination - Projects (cont.)

- Biscayne Bay Coastal Wetlands CERP Project
- Regulatory Compliance
- Biscayne Bay Water Resource Rule Development
- South Miami-Dade Outreach
- Florida Bay MFL Research
- Litigation Support

# Field Conditions – Site 1

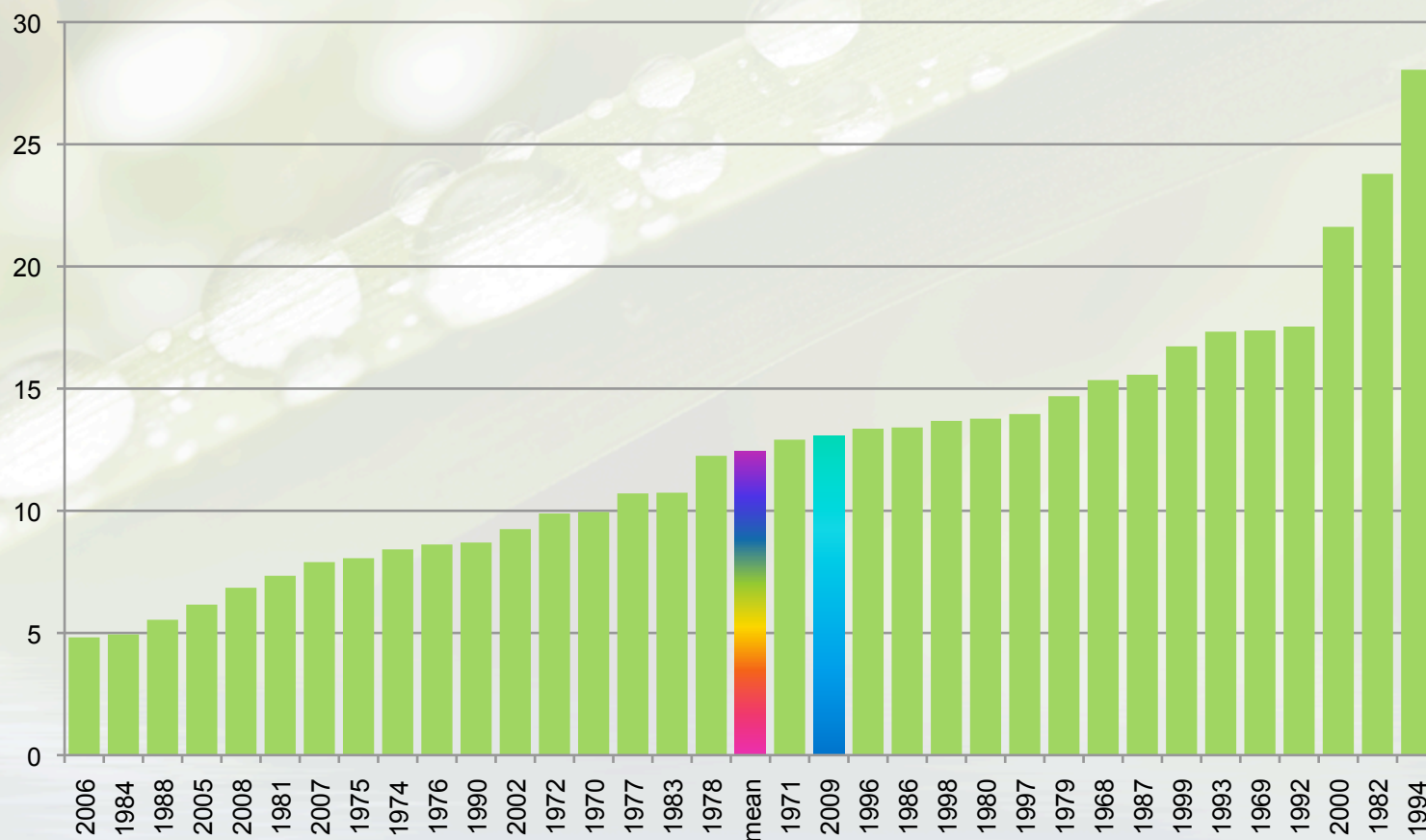


November 25, 2009



# Rainfall During Draw-down Period

Rainfall October Through January



## S21A Flow

