South Miami-Dade Water Issues Coordination Update

SFWMD Governing Board Workshop
September 8, 2010

Scott Burns, P.G., Chief Scientist
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
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?
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 5th 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
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 15th through April 30th based on field conditions
**Canal Water Level Ranges (NGVD29) for Opening and Closing Gates**

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<tbody>
<tr>
<td>S-21A</td>
<td>2.2’-1.8’</td>
<td>1.8’-1.4’</td>
<td>1.4’-1.0’</td>
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<tr>
<td>S-20F</td>
<td>2.2’-1.8’</td>
<td>1.7’-1.3’</td>
<td>1.4’-1.0’</td>
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<td>S-179</td>
<td>3.9’-3.1’</td>
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<td>3.1’-2.7’*(1)</td>
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*(1) Oct 15 - Nov 15 (and wet conditions if needed to end of April)*
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’
C-103 Low Range (S-20F) = Open at 1.4’ Close at 1.0’

S20F HW

Field Station

S20F HW
What’s coming next

- September 29th; 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
• 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