

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

EXHIBIT 25



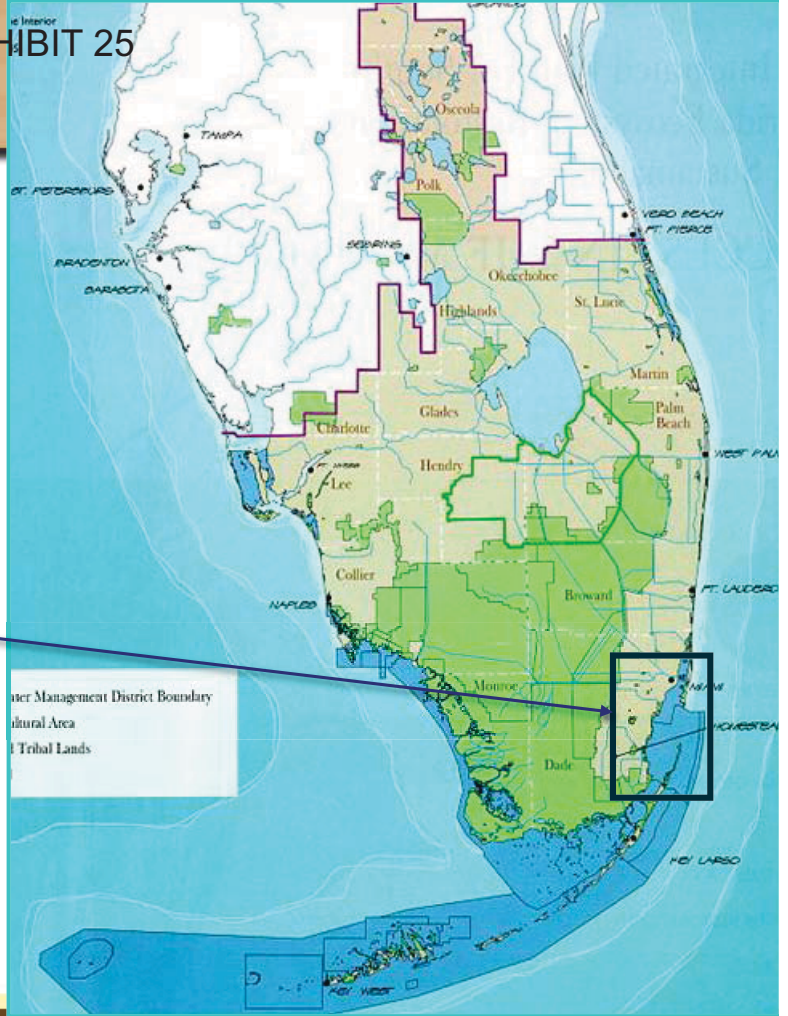
**Miami-Dade Canal Agricultural Drawdown Study**

**February 12, 2008 Governing Board**

**Dewey Worth – Restoration Planning Division, Everglades Restoration**

EXHIBIT 25

**Agricultural Drawdown Area in Miami-Dade County**



## Farming and Water Management History

- Extensive farming began in 1900s when local farmers dug and maintained local drainage canals
- Canals expanded and upgraded by C&SF project in 1960s to aid economic output of agriculture and commerce
- Common practice is to lower water levels at beginning of dry season
- This practice has been acknowledged since 1981 by SFWMD

*“Governing Board gave no guarantee for flood protection – operate system to minimize impacts”*




Region impacted by agricultural drawdown

EVERGLADES

### Biscayne Bay Coastal Wetlands

Alternative "0"

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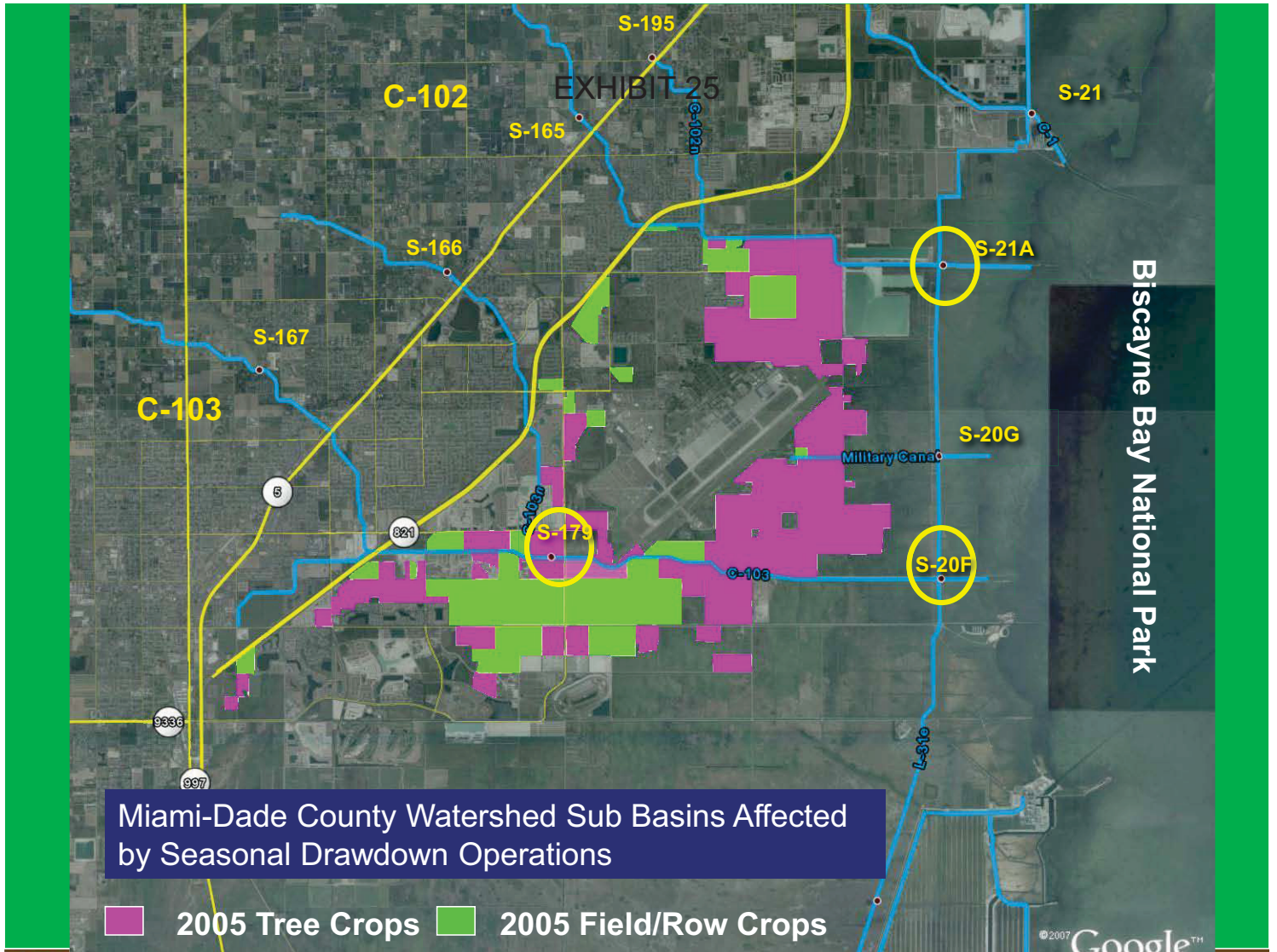


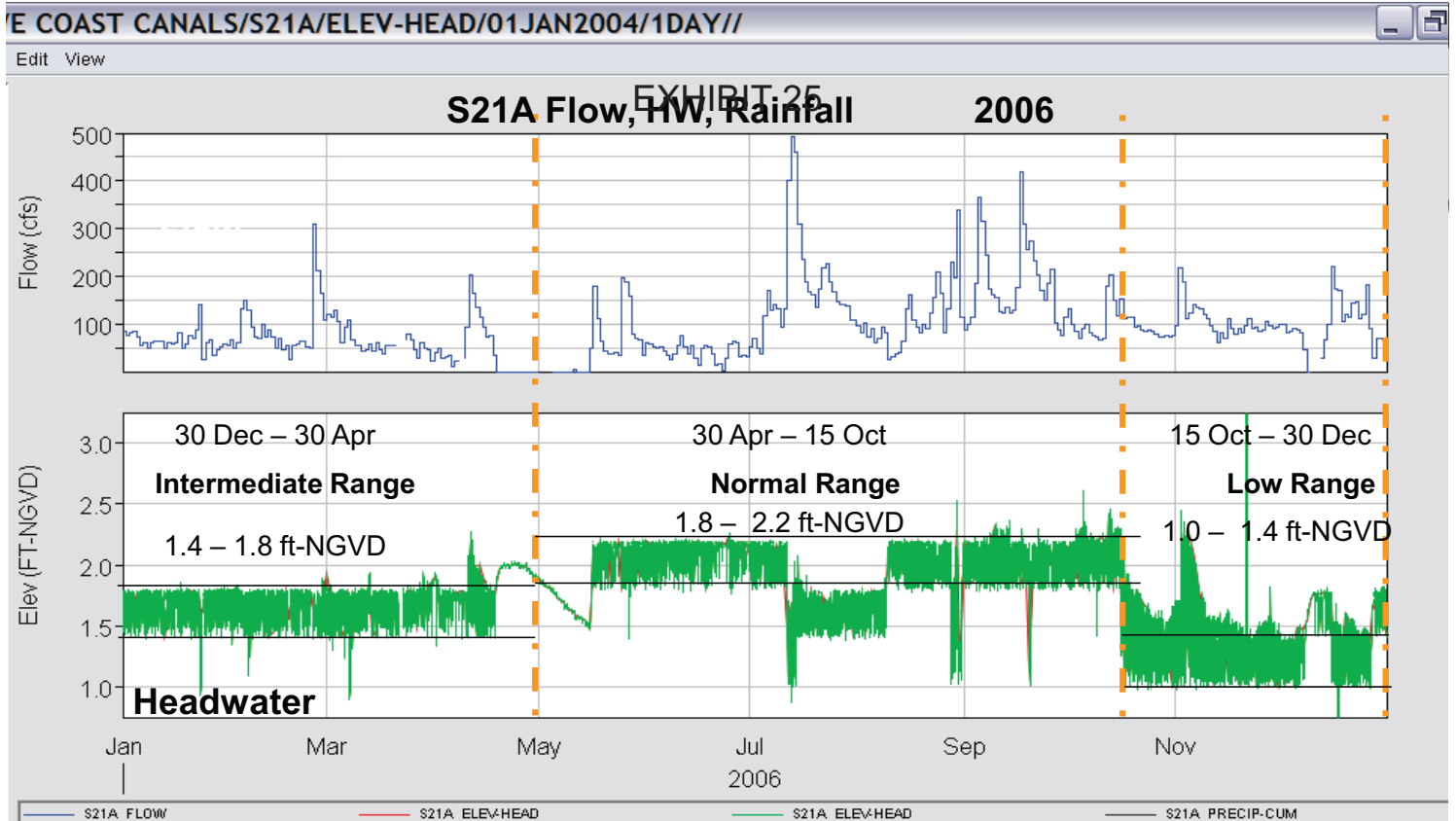
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**Three modes of operation based on field conditions and agriculture:**

- Normal Range Operation (April 30th to October 15th)
- Intermediate Range Operation (December 30th to April 30th)
- Low Range Operation (October 15th to December 30th)

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**Drawdown Impacts to Biscayne Bay**



- Lowering canal levels at the start of the dry season releases water to Biscayne Bay at the wrong time
- Biscayne National Park estimates 63,000 acre-feet annually (average) lost that could provide dry season groundwater flow
- Biscayne Bay often experiences high salinities later in the dry season which this water could help mitigate

EXHIBIT 25  
**Stakeholder Issues Discussed at WRAC**



- **Biscayne Bay Coastal Wetlands Project recommends eliminating the drawdown practice (part of phase 2 plan) – provides significant environmental benefits**
- **Farming intensity has diminished and crop types have changed from historical**
- **Conversion of crop lands to urban development**
- **Farming still active part of local economy and practice still needed**



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**Other Emerging Issues**



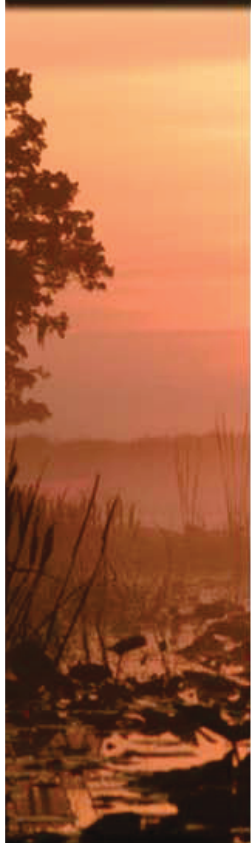
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- **Increased evidence of regional salt water intrusion within the Biscayne Aquifer**
  - **Increased mining activity that could accelerate mixing of surface water and salt-intruded aquifers**
  - **Florida Power and Light expanded power facility at Turkey Point and affect on regional water resources**
  - **Proximity of wellfields to saltwater intrusion line and future wellfield sustainability**

EXHIBIT 25  
**Agricultural Drawdown Study**

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- **Fact-finding effort**
  - **Work with local agricultural representatives to identify drawdown practices and future needs**
  - **Identify temporary opportunities to change seasonal practice in the short term**
  - **Identify potential operational or structural improvements to lessen water losses and address other water resource needs throughout the basin**



# Questions