

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

South Florida Ecosystem Restoration Task Force Workshop



ROG Planning and Stakeholder Involvement

February 17, 2011

*Temperince Morgan, Director
Policy and Coordination Department
Everglades Restoration and Capital Projects*

*Tom Van Lent, Senior Scientist
Everglades Foundation*

sfwmd.gov



River of Grass Planning Process

- **Planning Process that**
 - **Considered new science**
 - **Led to the identification of new restoration flow targets**
 - **Identified vision and goals for restoration**
 - **Developed and evaluated alternatives to obtain a better understanding of**
 - **Land needs for restoration (USSC acquisition)**
 - **Viable configurations of features to store, treat, and deliver restoration flows**



What made the ROG Planning Process unique and successful?

- Incorporation of new science
- Public participation
- Facilitation and staff/management involvement and commitment
- System-wide perspective



Incorporation of New Science

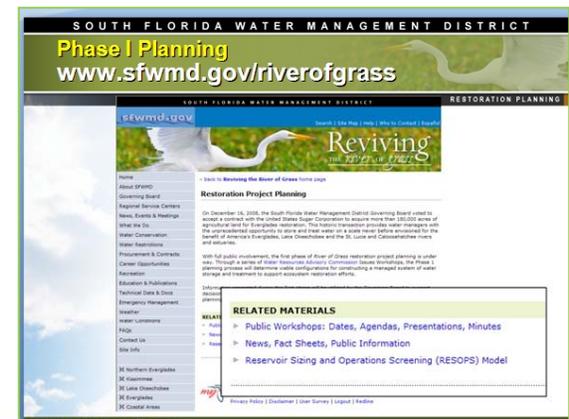
- **Technical workshops held to discuss new science related to hydrologic restoration targets**
- **Participants included broad range of governmental and non-governmental scientists and hydrologists**
- **Outcome from workshop**
 - **Bookend scenarios that identify operational flow targets**
 - **Includes range of average flow volumes, monthly timing, and inter-annual variability**



Public Participation

- **Accessibility of process to public**

- All stakeholders at table
- Open forum for exchange of information
- Public meetings were webcast and meeting materials were posted to website
- Public had opportunity to interact with key technical staff



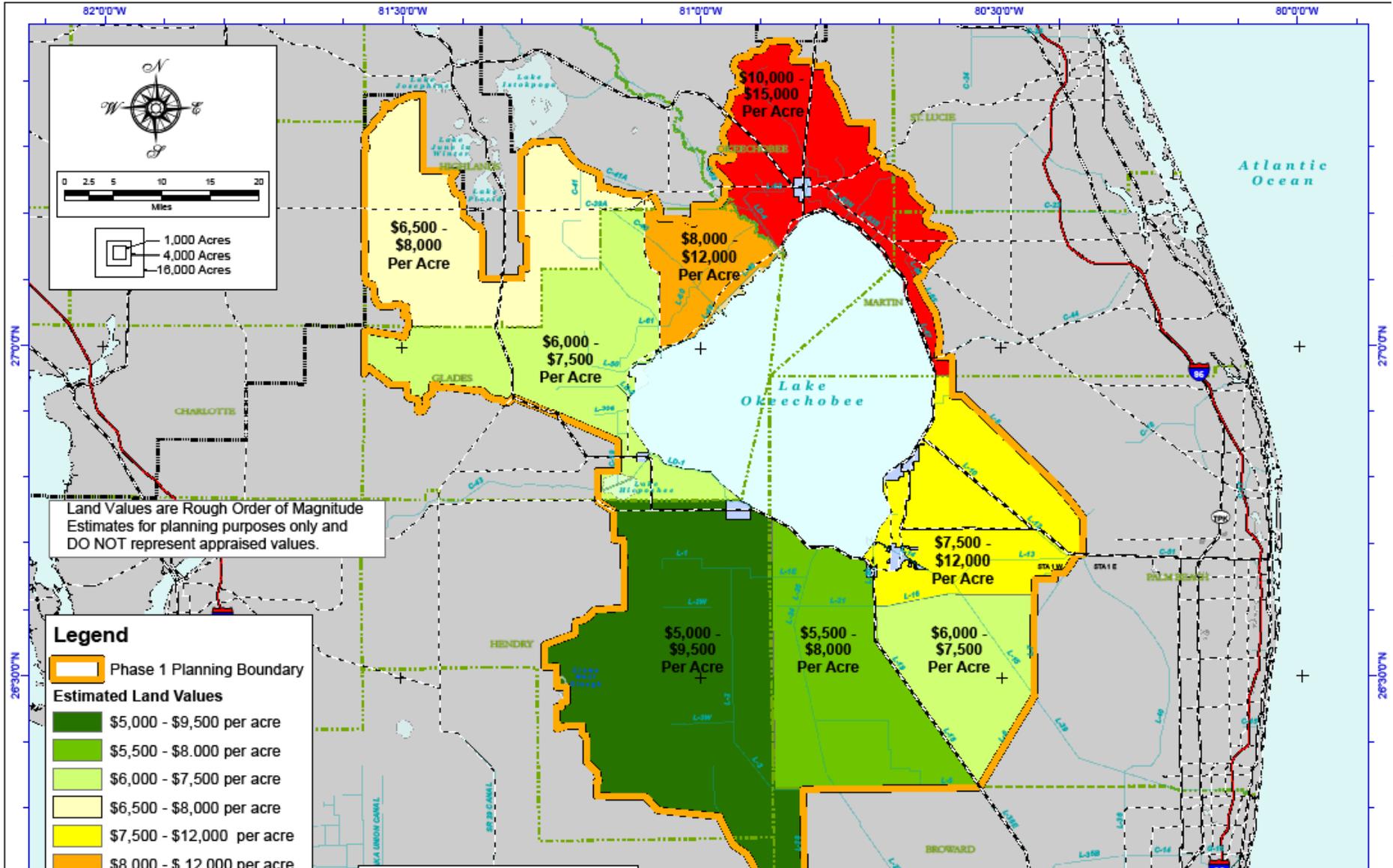
Public Participation (continued)

■ Education and Participation

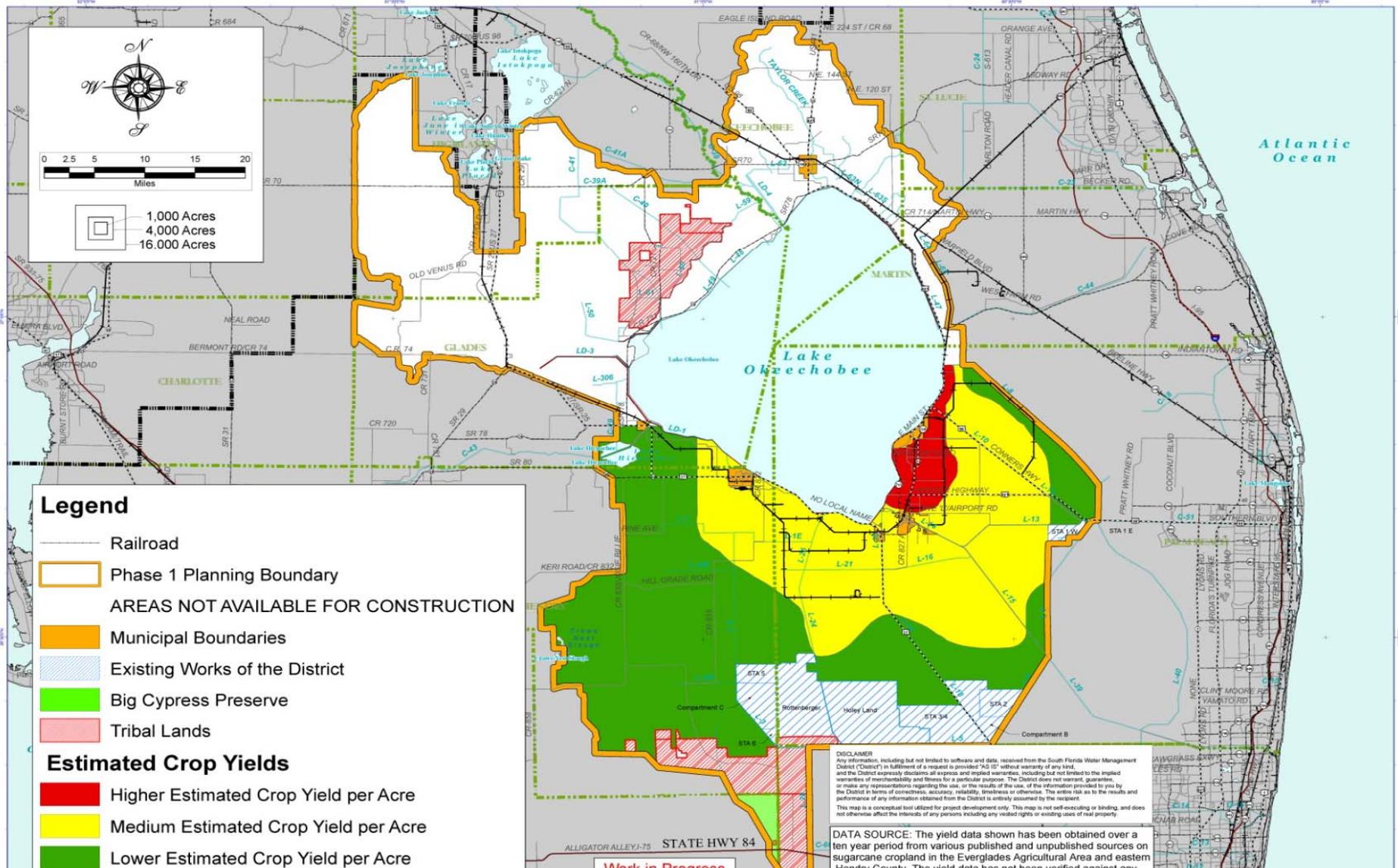
- Developed tools that allowed public to improve their knowledge and understanding of technical issues
 - Real estate costs quantification
 - Sugar cane crop yield quantification
 - Accessible modeling tools to allow near-real time testing of stakeholder concepts or to inform stakeholder decisions



Planning Evaluation Tool Quantification of Costs and Potential Impacts – Real Estate Costs

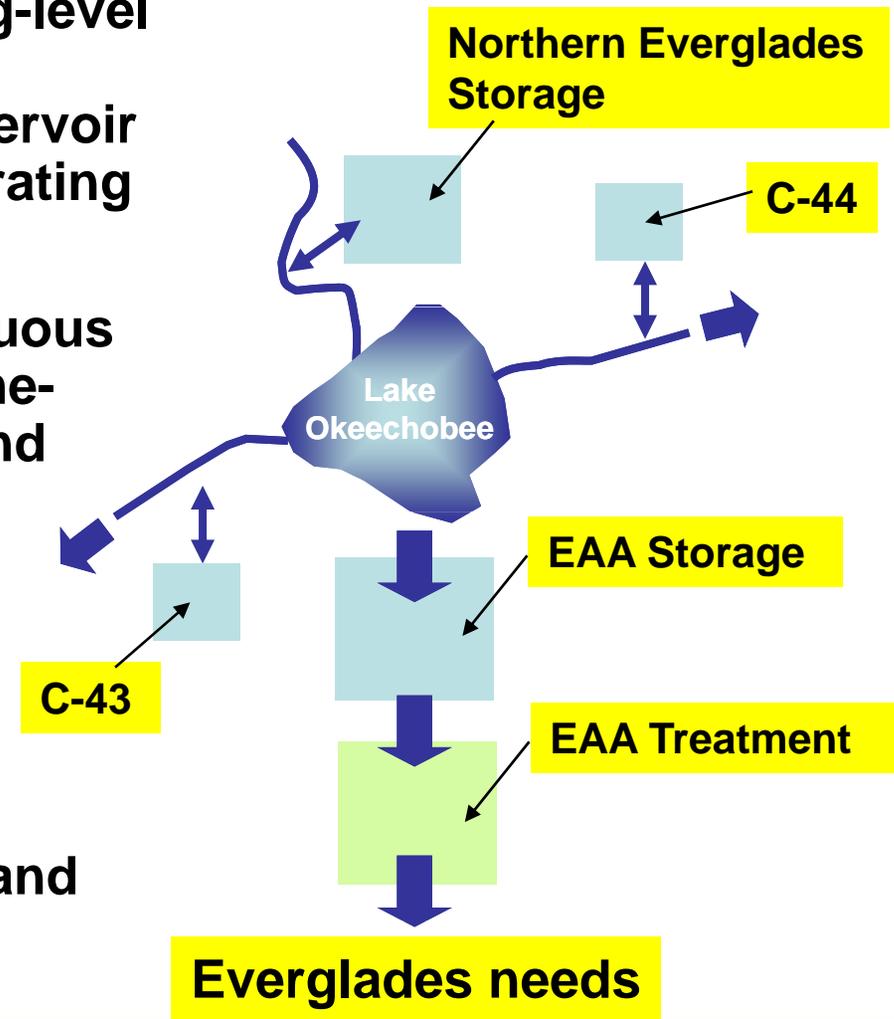


Planning Evaluation Tool Quantification of Costs and Potential Impacts – Sugar Cane Crop Yield



RESOPS Modeling Tool

- Provides rapid screening-level testing of the integrated effects of alternative reservoir sizes and proposed operating rules
- Performs 41-year continuous simulations (monthly time-step) of the hydrology and operations of the water management system
- Used to generate “performance maps” that summarize 140,000 model runs to assist the public in sizing storage and treatment features or to illustrate tradeoffs



Public Participation (continued)

■ Education and Participation

- **Developed tools that allowed public to improve their knowledge and understanding of technical issues**
 - **Real estate costs quantification**
 - **Sugar cane crop yield quantification**
 - **Accessible modeling tools to allow near-real time testing of stakeholder concepts or to inform stakeholder decisions**
- **Public could then use the tools to develop proposed configurations**
 - **Interactive workshop where stakeholders worked in teams to develop proposed configurations**
 - **Each team was provided a workstation and assigned a facilitator and an engineer to assist them with their configuration development**



Facilitation and Staff/Management Involvement and Commitment

- Meetings were led by a facilitator who represented a neutral position
- Process was staffed at the highest level
 - Senior level staff (scientists, engineers, modelers, planners) were assigned to the team
 - This project was identified as the priority effort for those staff
- Senior management were highly engaged
 - Regular meetings to provide direction and assist with issue resolution
 - Attendance at public meetings



System-wide Perspective

- **Instead of focusing on a portion of the system, this planning effort used a system-wide perspective which included simplified, system-wide analytical tools**
 - **Modeling tools**
 - **Screening level model (RESOPS)- allows for rapid assessment of numerous scenarios including optimization routine**
 - **Evaluation methodology**
 - **Restoration potential graphics**
 - **“Ever Views”**

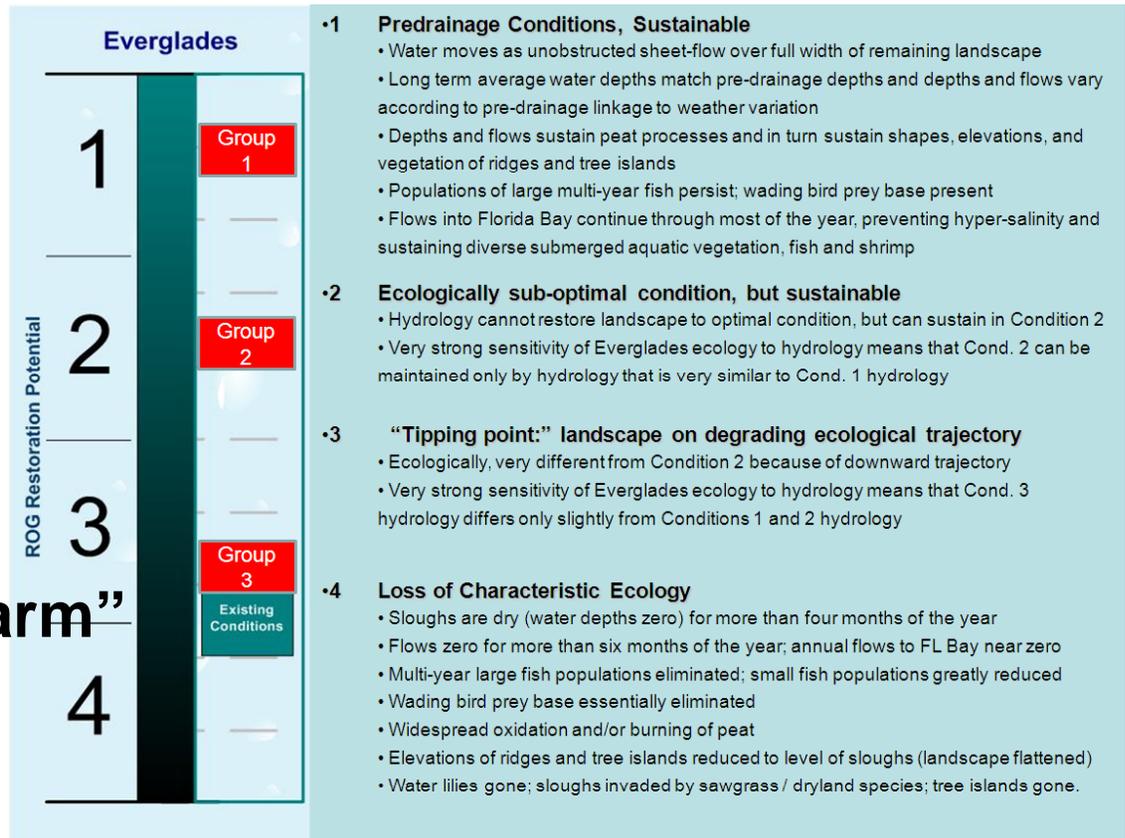


Restoration Potential

Ecological performance measured as a function of “Restoration Potential”

- Northern Estuaries
- Lake Okeechobee
- Everglades
- Southern Estuaries
- System-Wide

LOSA Demands “no harm”



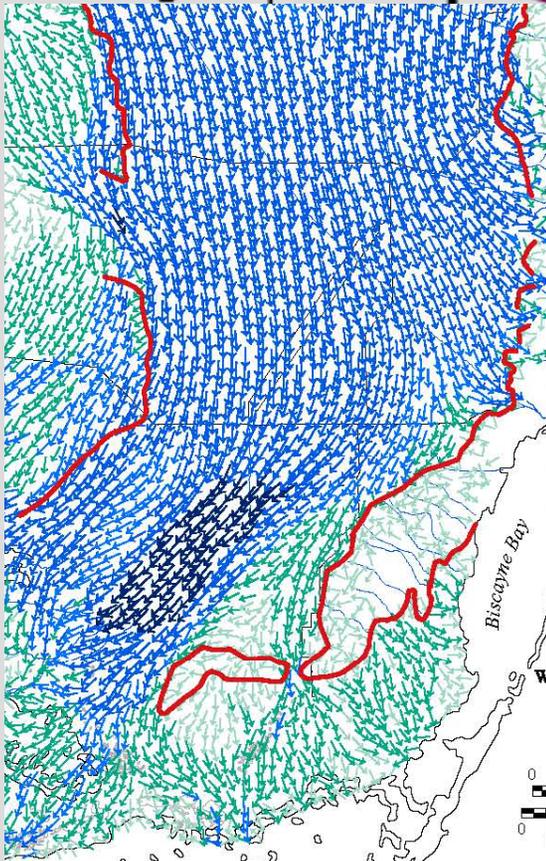
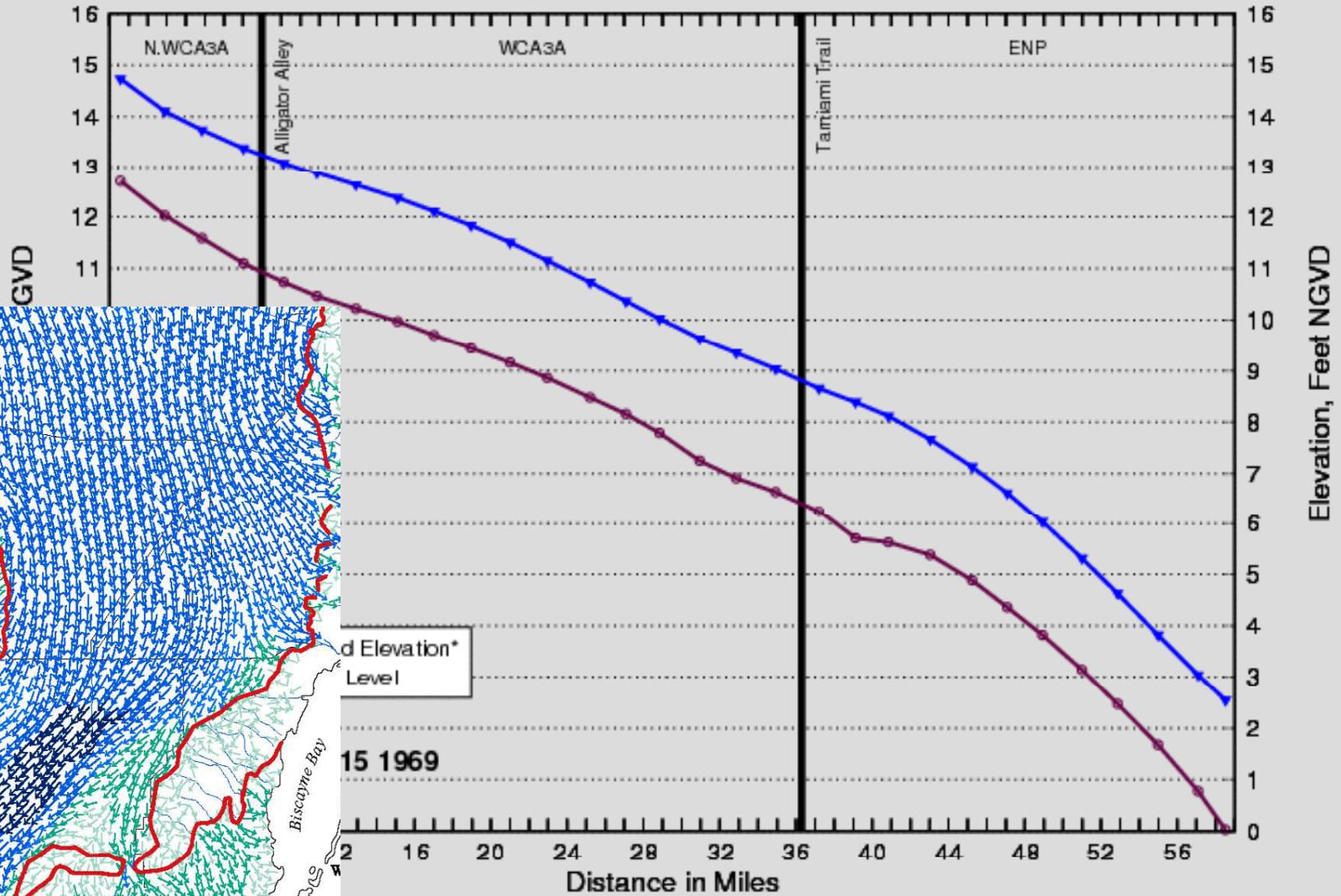
"Ever Views"

- Viewing window concept
 - Tools to link hydrology and ecology
- Neither performance measures, nor targets
 - But do facilitate whole system viewing
- Applied equally across all Everglades models
 - Pre-drainage, Current, Future (scenarios)
- Viewing Windows
 - Depth, duration, discharge, seepage, flow directions, and spatial components



Water Depth Viewing Window

Transect L1 for Pre-drainage NSRSMv3.3



Ground Elevation*
Level

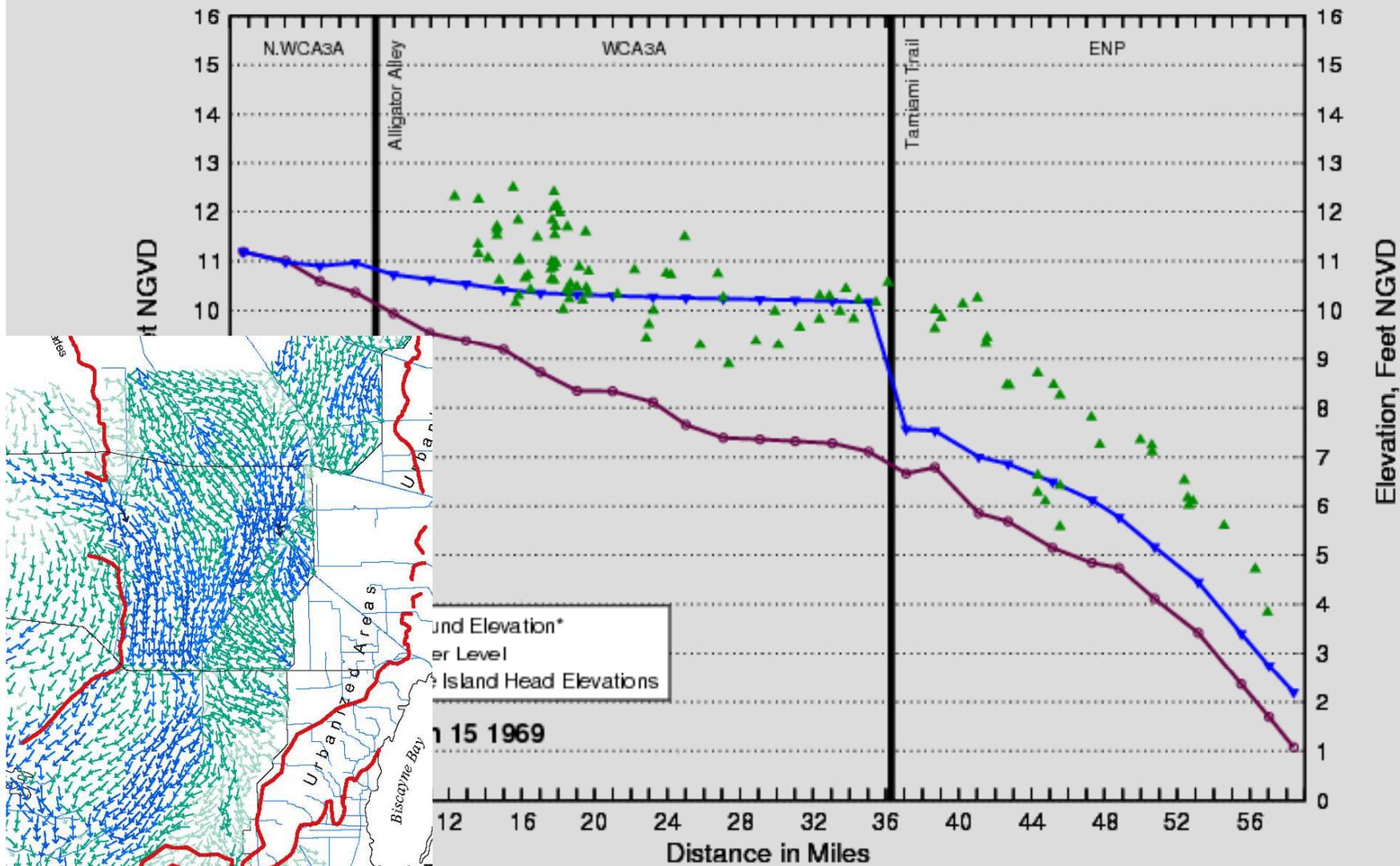
15 1969

0
0
Elevation = slough bottom.
0
0
age model ground surface.

Script used: depth_transects.scr
Filename: depth_transects_L1_NSRSv3.3_ANIM.agr

Water Depth Viewing Window

Transect L1 for Scenario RSM_PCB1_GLD_rev_4848



Ground Elevation*
Water Level
Island Head Elevations

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0 elevation = slough bottom.
1 range model ground surface.

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Stakeholder Views on River of Grass Planning

River of Grass Planning Process

- Educated stakeholders
- Treated stakeholders respectfully and constructively
- Allowed direct interactions between stakeholders and other stakeholders, between stakeholders and agency
- Was fact-driven, focused, and inclusive



What Planning Effort Demonstrated

- ***Fear: Involving stakeholders will give unworkable scenarios.***
 - Scenarios were innovative and broad.

- ***Fear: Stakeholders don't have capability.***
 - Groups either brought their own technical representation or relied on SFWMD, which improved their respect for agency's expertise.

- ***Fear: Involving stakeholders will slow progress.***
 - Progress was faster because focus was on issues that people care about.



Moving Forward

- **Adopt similar process for federal and state efforts.**
- **Focus on reducing (not eliminating) risk to a point where it is possible to move forward.**
- **Get actionable plans in 12 to 18 months that fit into understandable long-term plans.**



Summary: Key Elements of Success

- **Incorporation of new science**
- **Public participation**
- **Facilitation and staff/management involvement and commitment**
- **Unique, customized tools**
- **System-wide perspective**





Questions?