

# Regional Broward Water Initiatives

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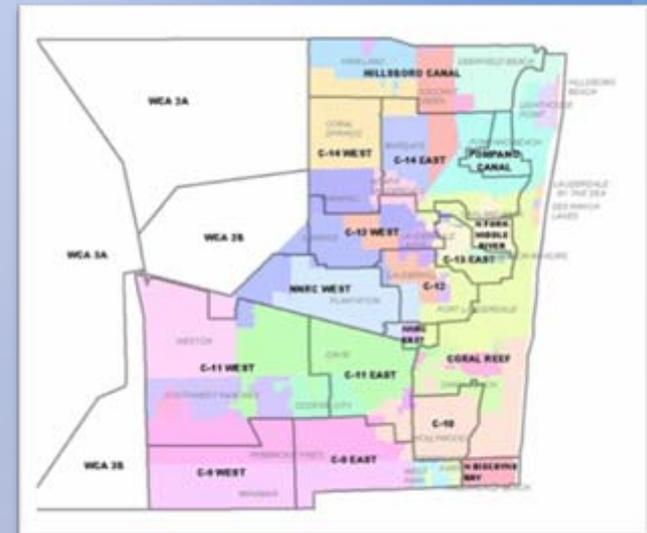
June 4, 2009

# Presentation Overview

- ❖ **Background**
- ❖ **Coordination and Planning**
- ❖ **Assessments and Management**
- ❖ **Conservation**

# BACKGROUND

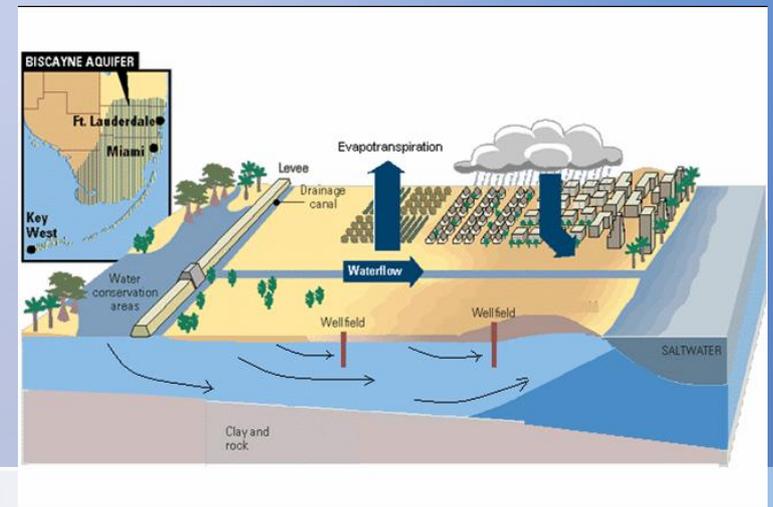
- The Broward County-wide Integrated Water Resources Plan (IWRP)
- Initiated in 1997
- Cooperative effort with cost share support
- Principle strategies
  - » Water assessments
  - » Water management
  - » Intergovernmental coordination
  - » Conservation and outreach



# IWRP Efforts to Date

## Largely Focused on the Technical and Outreach

- Creation of a County-wide Hydrologic Model
- Development of North Regional Saltwater Model
- Florida Aquifer Assessment
- Countywide Water Management Master Plan
- IWRP Grants Program
- Comprehensive Water Conservation Program
- Productive Collaborations



# COORDINATION AND PLANNING TODAY

## Bringing Together the Policy and Technical

- The Broward Leaders Water Academy
- The Broward Water Resources Task Force
- The Broward Climate Change Task Force



# The Broward Water Resources Task Force

## Activities to Date

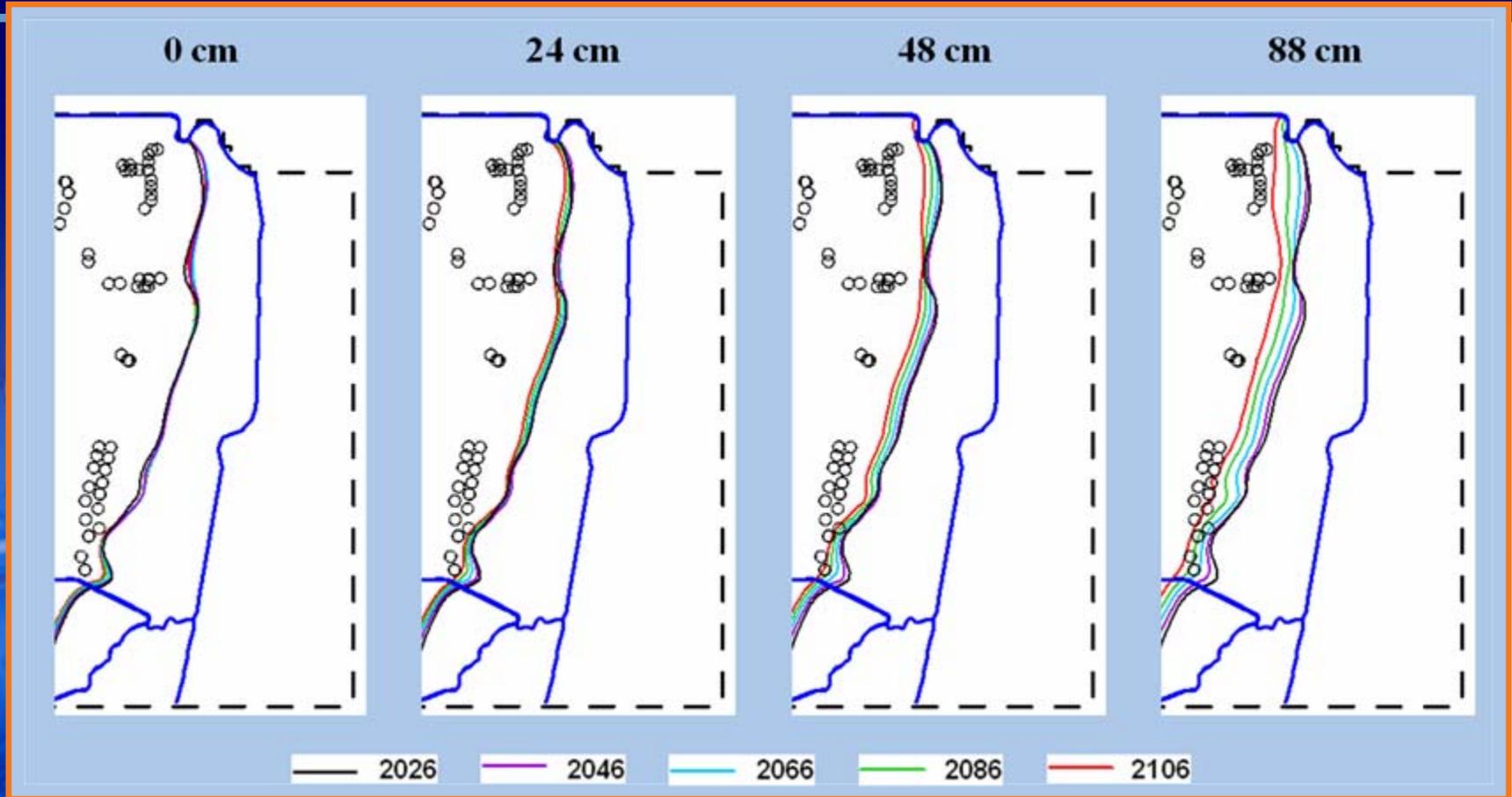
- Background Presentations
- Field Exposure
- Discussion of Governance Options
- Reassessment of Demand Projections
- Development of regional water supply project concepts
- Support for regional water conservation incentives program
- Joint meeting with Palm Beach on June 5



# ASSESSMENTS AND PLANNING

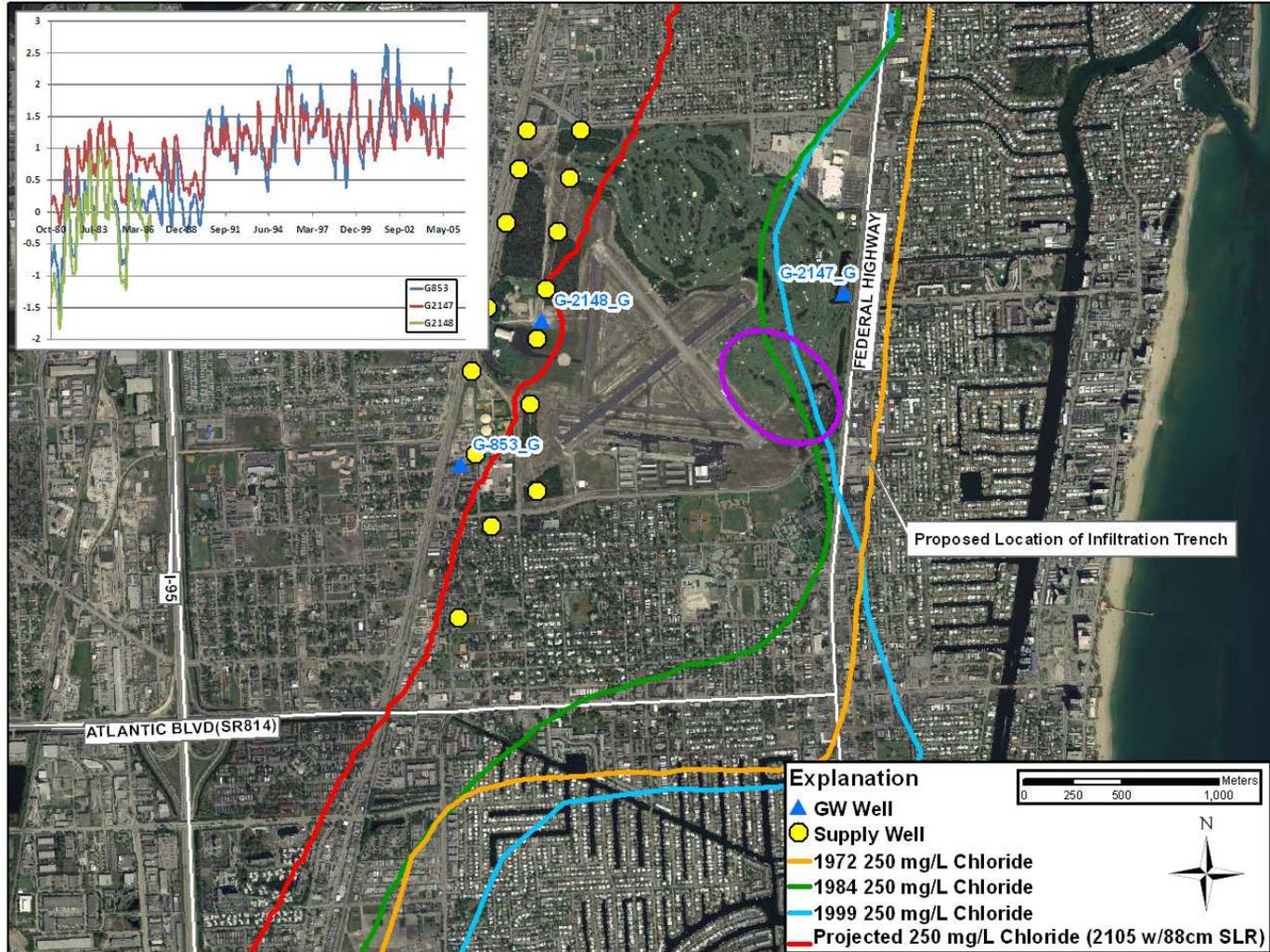
- Regional Water Supply Project Concepts to be modeled in the Countywide Master Plan
- Regional Saltwater Models for Central and Southern Broward to be developed by 2013
- Use of County's models to evaluate climate change impacts and mitigation strategies
- To pursue creation of a regional stormwater management model
- IWRP grants continue to fund coordinated water resource management and development projects

# Predictive Movement of Salt Front with Sea Level Rise



Sea level rise on the order of the last century (24cm/100yr) suggest net landward movement of the saltwater front whereas the mean and upper (48 & 88 cm) IPCC predictions suggest advanced intrusion into well fields

# Pompano Infiltration Trench Pilot Project



# CONSERVATION ACTIVITIES

- NatureScape Broward
- Water Matters Day
- NatureScape Irrigation Service
- Countywide Conservation Proposal

# NatureScape Broward



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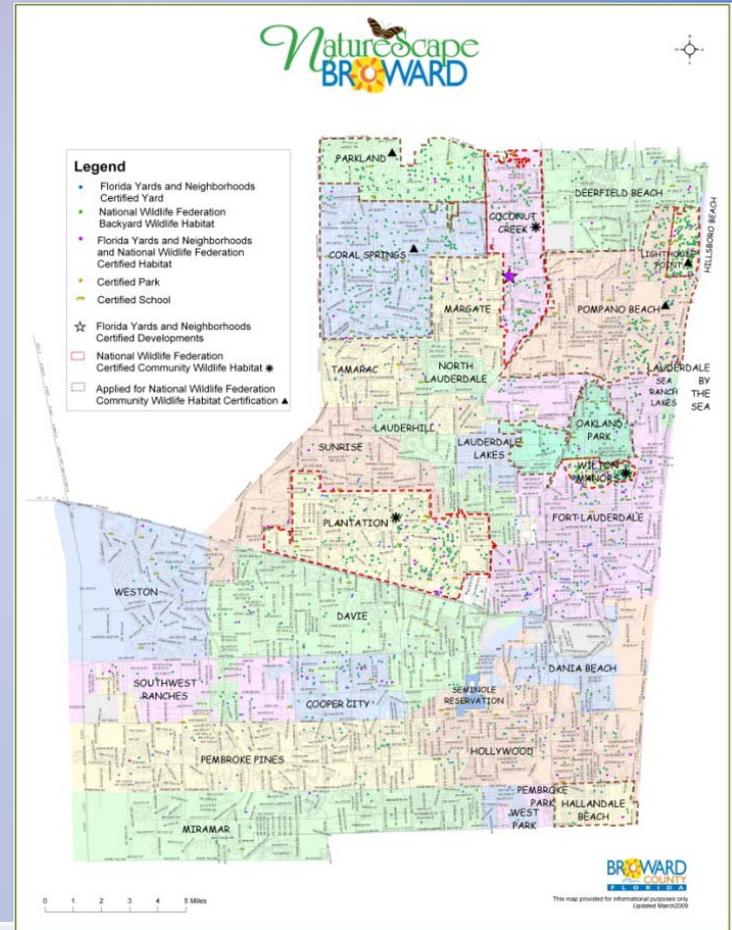
# Working with municipalities

## Certified Community Wildlife Habitats

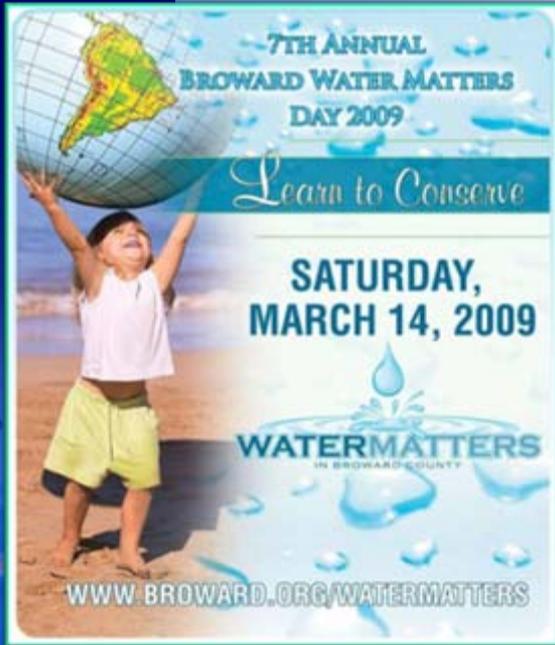
- Broward County
- Wilton Manors
- Lighthouse Point
- Coconut Creek
- Plantation
- Parkland

## Registered

- Coral Springs
- Pompano Beach
- Oakland Park
- Hallandale Beach
- Davie



# Water Matters Day



43 Exhibitors  
Over 3,200 Attendees

# Water Matters Day



**Water Conservation, Native Landscaping  
Environmental Stewardship**

# Broward Schools NatureScape Environmental Initiative

- Classroom education
- After school programs
- Field trips
- Teacher in-service training
- Custodial staff training
- Habitat steward training



*In school presentations delivered to  
approximately 6,500 students since January 2008*

# Broward Schools NatureScape Environmental Initiative

## Mini Water Matters Days

- Sawgrass Springs Middle - 250
- Seminole Middle – 400
- Falcon Cove Middle – 500
- Attucks Middle – 350
- Silver Lakes Middle - 225
- Lyons Creek Middle – 675
- Driftwood Middle- 600
- Pioneer Middle – 735



**60 Certified Broward Schools!**

# NatureScape Irrigation Service



- 23 municipalities, public and private utilities, and County Water and Wastewater Services
  - Targets large water users
  - Irrigation system evaluations to determine system efficiency
- 286 evaluations completed in 2008
  - 22% average water use reduction per evaluation
  - Over 155 million gallons of water saved

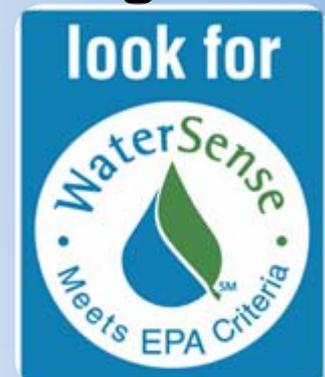
***943 evaluations to date***  
**Actual Water Savings**  
**435.7 MG**



# Water Conservation and Incentives Program

## Objectives

- Encourage stronger water conservation ethic among water users through increased coordination, public education, and outreach
- Provide incentives and resources to residents for realizing significant water savings through plumbing retrofits



## Strategies



**Aggressive media campaign to promote program**



**Water conservation outreach through existing and new communication tools**



**Incentives (plumbing fixture rebates and free replacements)**

# Water Conservation and Incentives Program

## Program Approach:

Cooperative effort among Broward municipalities and water providers

Residential water users

County-wide, regardless of city of residence

Uniform services and benefits

Provide economies of scale

## County-wide Annual Incentive Goals

Reduce  
annual water  
use

- Toilets by 20%
- Faucets by 32%
- Showerheads by 40%



Save 6.7  
million gallons  
of water per  
year

- Toilets by 800,000 gallons per year
- Faucets by 1.5 million gallons per year
- Showerheads by 4.4 million gallons per year

Based on water use with fixtures meeting current federal standards vs. water use with the higher-efficiency models that would be offered as incentives

# Conclusions

- The County-wide IWRP provides a framework for regional water resource planning and management
- The Broward Water Resources Task Force has elevated this strategy from the technical to the policy level
- These efforts lend support to the goals of the RWA Rule, priorities for SB 444, and the District's water conservation plan
- This approach will have continued relevance in the realm of water, but also in addressing climate change

# QUESTIONS?