

# FY2012 Agency Accomplishments and Performance Measures



# Presentation Outline

- ▶ **Flood Control (Tommy Strowd)**
- ▶ **Natural Systems/Water Quality (Ernie Barnett)**
- ▶ **Water Supply (Terrie Bates)**
- ▶ **Mission Support (Doug Bergstrom)**
- ▶ **Looking Ahead (Melissa Meeker)**

# **Core Mission: Flood Control**

**Tommy Strowd, Division Director  
Operations, Maintenance & Construction**

# FLOOD CONTROL

*You directed us to:*

**GOVERNING BOARD  
PRIORITY**

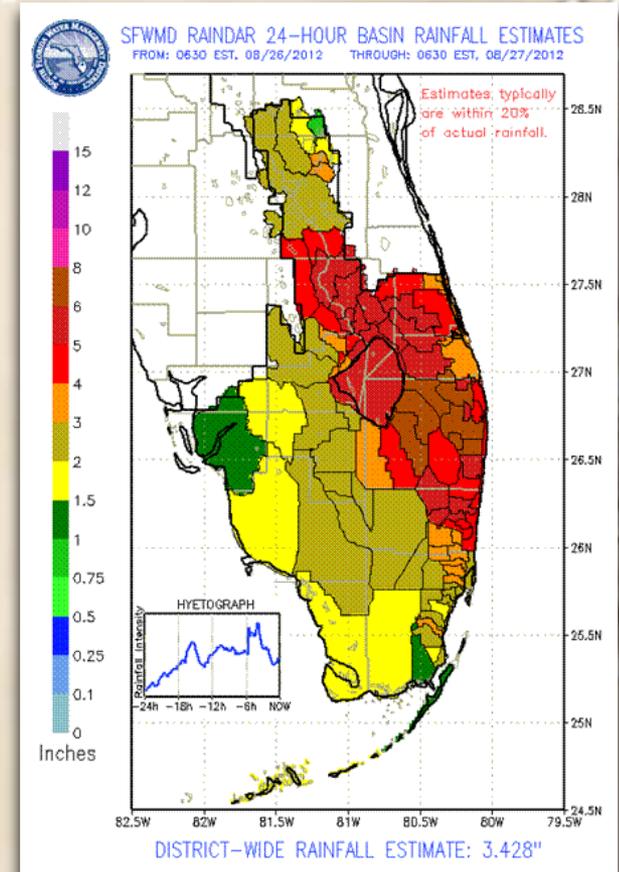
- ▶ Refurbish, replace, improve and manage the regional water management system by:
  - ▶ Implementing flood control system refurbishment projects (the 50-year plan)
  - ▶ Incorporating new works into water management system operations
  - ▶ Operating water management system to meet flood control and water supply needs
  - ▶ Coordinating with U.S. Army Corps of Engineers on levee inspections and improvements
  - ▶ Optimizing infrastructure maintenance by adhering to, or exceeding, industry standards and best practices

# Water Control Operations

- ▶ Provided around-the-clock staffing for real time monitoring and operations of the SFWMD water management system
- ▶ Successfully managed water flow in primary flood control network
  - ▶ Record wet October 2011
  - ▶ Record dry January-March 2012
  - ▶ Record early start of the wet season in May 2012
  - ▶ Record-setting rainfall from Tropical Storm Isaac in late August 2012
- ✓ All works operated in accordance with established operating criteria

# Tropical Storm Isaac

- ▶ Moved more than 105 billion gallons of water
  - ▶ Directed 3.1 billion gallons to L-8 Reservoir
  - ▶ Deployed nine temporary pumps in western Palm Beach County; moved 2.3 billion gallons of water
- ▶ Constructed emergency flow way at J.S. Corbett Wildlife Management Area
- ▶ Also provided emergency assistance to SRWMD for Tropical Storm Debby



# Engineering & Construction: Capital Projects



## ▶ Completed:

- ▶ Moore Haven Telemetry Tower
- ▶ C-41A Canal Bank Stabilization Segments 1 & 2
- ▶ Golden Gate 6 & 7 Replacement
- ▶ G-78, G-79 & G-81 Automation

## ▶ Ongoing projects:

- ▶ S-197 Replacement
- ▶ S-193 Navigation Lock Replacement
- ▶ East Coast Protective Levee Repairs

# Field Operations



- ▶ **Completed:**
  - ▶ **S-70 Gate #2**
  - ▶ **Spillway push button installation at S-65D, S-65E and S-71**
  - ▶ **Nubbin Slough pump station sedimentation repair**
  - ▶ **G-348 culvert replacement**
  - ▶ **Downstream canal bank restorations at S-153, S-61, S-63A and L-29**
  - ▶ **Bank restoration and removal of two miles of hazardous vegetation at C-18**

# Field Operations



- ▶ **Completed:**
  - ▶ Overhauled nine main pumps at G-404, G-409, G-349C and G-139
  - ▶ Refurbished engines at S-8, S-9, S-13, S-332B and S-332D
  - ▶ Installed rip rap at L-31E, enhancing discharge characteristics of six newly installed culverts

# Infrastructure Maintenance

- ▶ Replaced equipment and instrumentation at more than 39 critical water control structures
- ▶ Completed 494 inspections resulting in 45 capital projects
- ▶ Completed more than 300 survey and mapping requests
- ▶ Processed more than 1.3 million station days of hydrologic data for publishing in DBHYDRO
- ▶ Performed QA/QC on 300 data collection sites and 145 flow rating equations



# Engineering, Field Operations and Infrastructure Maintenance

- ✓ Met 100% of earned value targets for strategic and key projects (50-year plan)
- ✓ 100% of new works commissioned on schedule prior to project close out
- ✓ More than 80% of maintenance activities completed on schedule
- ✓ Less than 20% of work was unplanned
- ✓ All canals/levees passed annual pre-hurricane inspection

# Land Resources: Real Estate



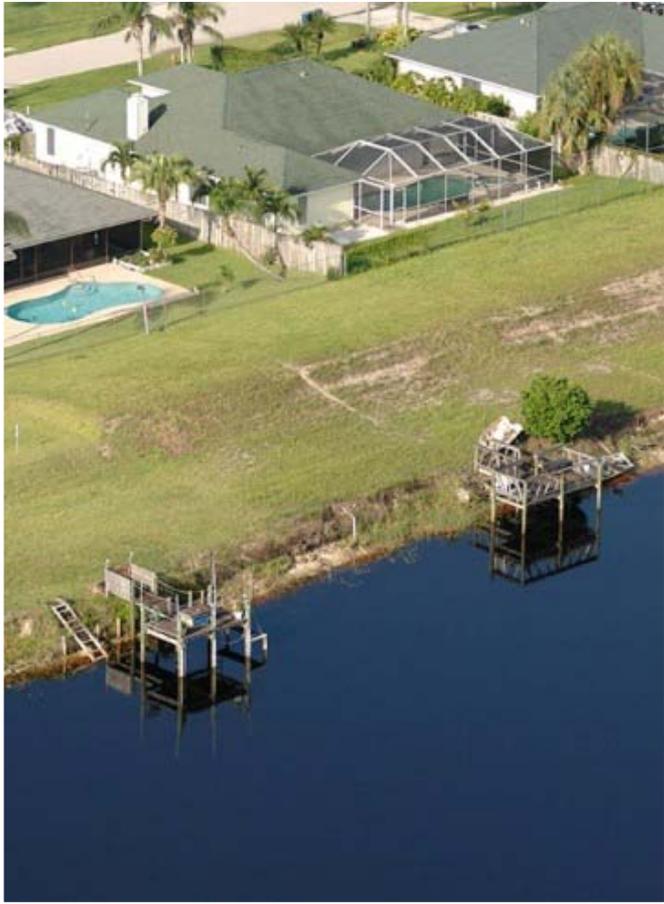
- ✓ Performed 243 property inspections
- ▶ Provided searchable database of land leases and land-related documents on District website
- ▶ Updated policy for leased lands
- ▶ Initiated comprehensive land assessment

# Land Resources: Vegetation Management



- ✓ Treated 34,546 acres of invasive terrestrial and aquatic vegetation in District canals and rights of way
- ✓ Mechanically removed 10,500 acres of submerged vegetation in District canals
- ✓ Removed hazardous and exotic vegetation along 84 miles of canals and levees
- ▶ Released 59,322 weed-eating grass carp into District canals to control submerged vegetation

# Land Resources: Right of Way



- ▶ More than 2,000 miles of canal/levee rights of way inspected monthly
- ▶ More than 2,100 site-specific compliance inspections performed
- ▶ Processed 368 permit applications
- ▶ Completed 342 permit transactions
- ▶ Completed 204 final permit inspections
- ▶ Resolved 8 enforcement cases

# Emergency Management



- ▶ Activated EOC to manage Tropical Storm Isaac response and recovery
- ▶ Successfully integrated Disaster/Emergency Management & Business Continuity Program "Best Practice" Standards into District Comprehensive Emergency Management Plan
- ▶ Conducted 20 safety courses

# **Core Mission: Natural Systems / Water Quality**

**Ernie Barnett, Director  
Everglades Policy & Coordination**

# NATURAL SYSTEMS/WATER QUALITY

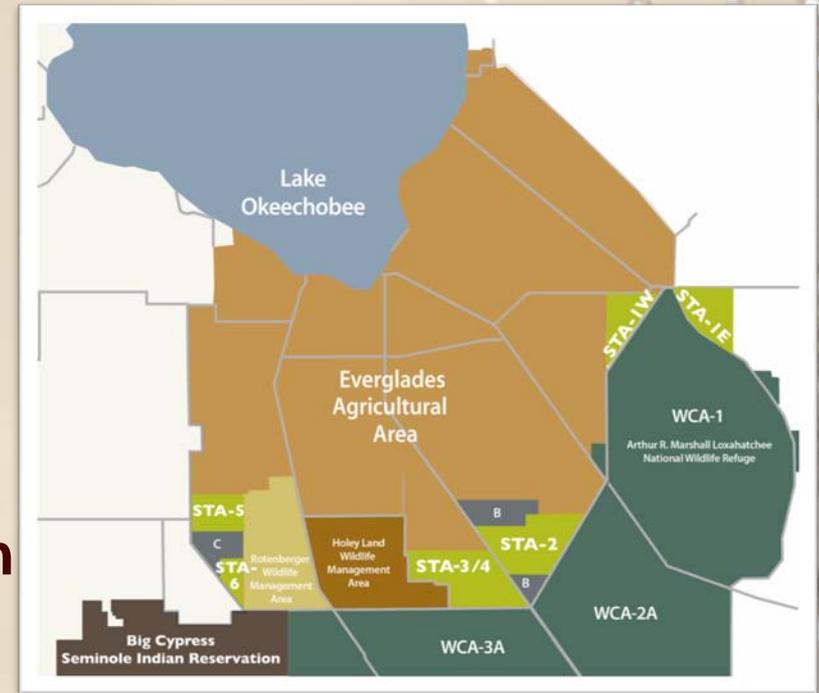
*You directed us to:*

**GOVERNING BOARD  
PRIORITY**

- ▶ Restore the Northern and Southern Everglades by:
  - ▶ Expanding and improving water storage
  - ▶ Implementing cost-effective solutions to improve water quality treatment, reduce nutrient loads and achieve water quality standards
  - ▶ Complete and implement key ongoing and new restoration projects
  - ▶ Managing invasive exotic and nuisance vegetation on District lands

# Water Quality Florida's Commitment to Date

- ▶ **\$1.8 billion invested to date in Stormwater Treatment Area (STA) construction**
  - ▶ **57,000 acres of effective treatment area constructed**
- ▶ **Implemented Best Management Practices on 640,000 acres of land**
  - ▶ **Average phosphorus reduction of 55% over program's 16-year history (more than twice the amount required by law)**
  - ▶ **Active BMP program with continuous evaluation**



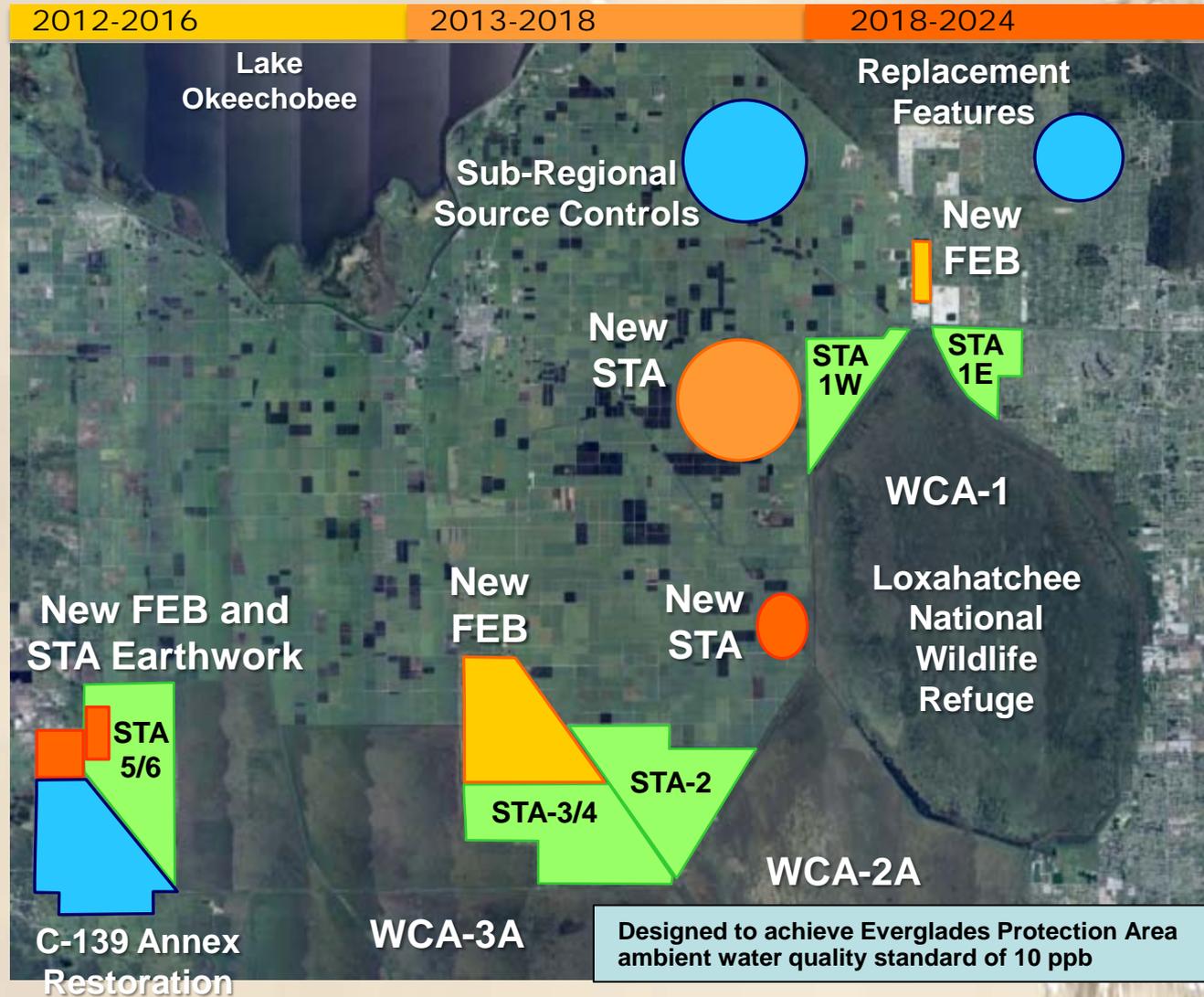
# Restoration Strategies

- ▶ **August 9, 2012: Governing Board approves recommended alternative to the Amended Determination**
- ▶ **September 11, 2012: FDEP issues final permits and consent orders to District authorizing operation and maintenance of existing stormwater treatment areas and requiring construction and operation of treatment area expansions and water storage features as part of state's plan that replaced EPA's Amended Determination**

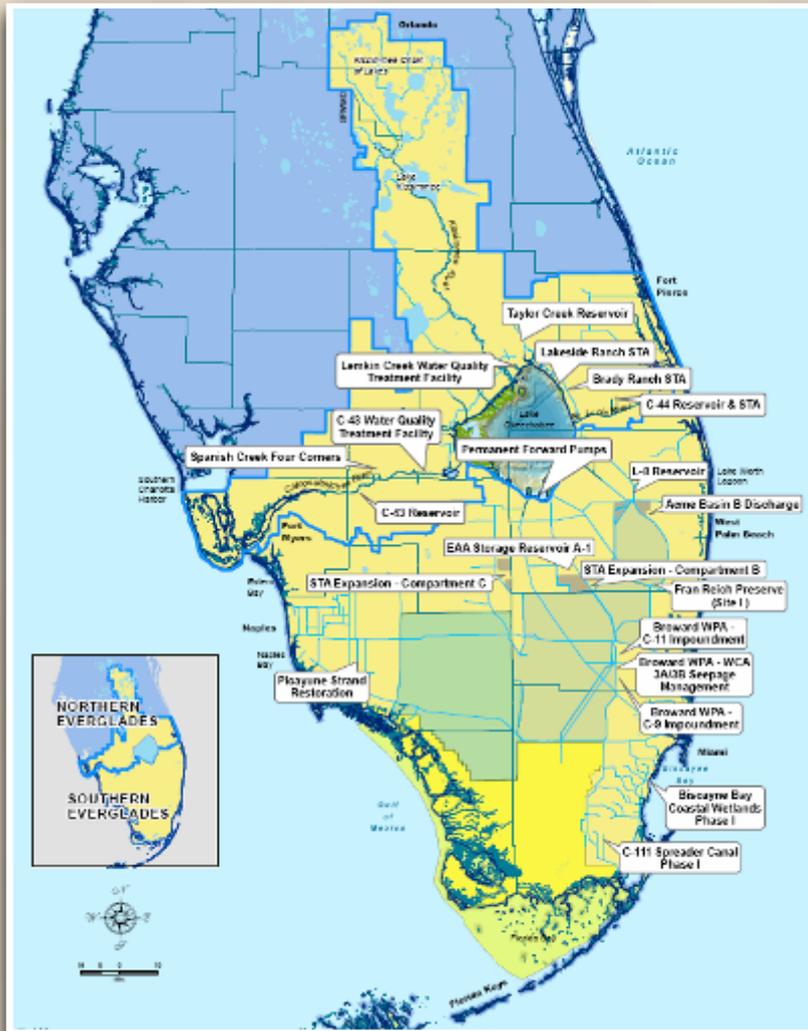


# Restoration Strategies Construction Schedule

- ▶ **Storage and Treatment Facilities (2012-2024)**
  - ▶ 6,500 acres of Stormwater Treatment Area (STA)
  - ▶ 110,000 acre-feet of shallow storage (Flow Equalization Basins )
  - ▶ 800 acres of earthwork within existing STAs to maximize effective treatment area
- ▶ **Sub-Regional Source Controls (2015 – 2020)**
- ▶ **Replacement Features**
  - ▶ Phase 1 (2015 – 2020)
  - ▶ Phase 2 (2019 – 2024)
- ▶ **C-139 Annex Restoration Mitigation Project (2014-2018)**



# Restoration Projects Planning & Design Progress



## ► Restoration Strategies

- Awarded Design-Build Contract for L-8 Reservoir Pump Station
- Completed 30% design for A-1 FEB; submission of permit applications

## ► Central Everglades Planning Project

- Assisting USACE to speed up planning for projects; proposed new planning process

# Restoration Projects Construction Progress



## ▶ Completed:

- ▶ Lakeside Ranch STA - Phase I
- ▶ Compartments B & C commissioned
- ▶ Hillsboro Aquifer Storage & Recovery (ASR) – Cycle 3 testing
- ▶ C-111 Spreader Canal Western Project – “Frog Pond”
- ▶ Biscayne Bay Coastal Wetlands –Deering Estates

# Restoration Projects

- ✓ Met 90% of earned value targets for ongoing and new restoration projects
- ✓ 100% of all new O&M and water quality projects commissioned on schedule prior to project close out



Lakeside Ranch Construction



G-436 Compartment B

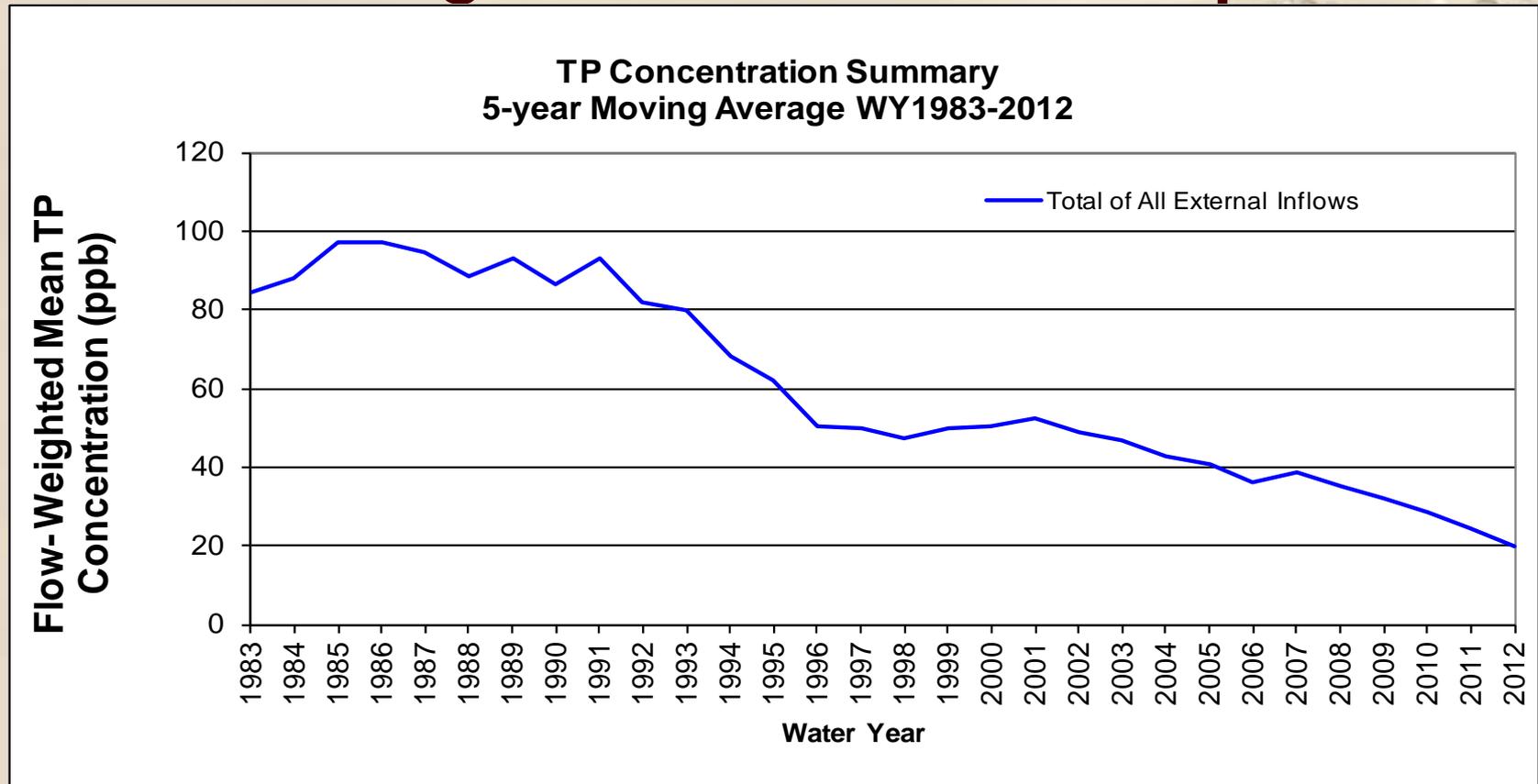
# Everglades Water Quality Improvements



- ▶ In WY12, treated more than 700,000 acre-feet of water in Stormwater Treatment Areas
  - ▶ Inflow Avg. = 111 ppb
  - ▶ Outflow Avg. = 19 ppb
  - ▶ Removed more than 178,000 pounds of phosphorus

# Cleaner Water for the Everglades

Total phosphorus concentrations into the Everglades continue to drop



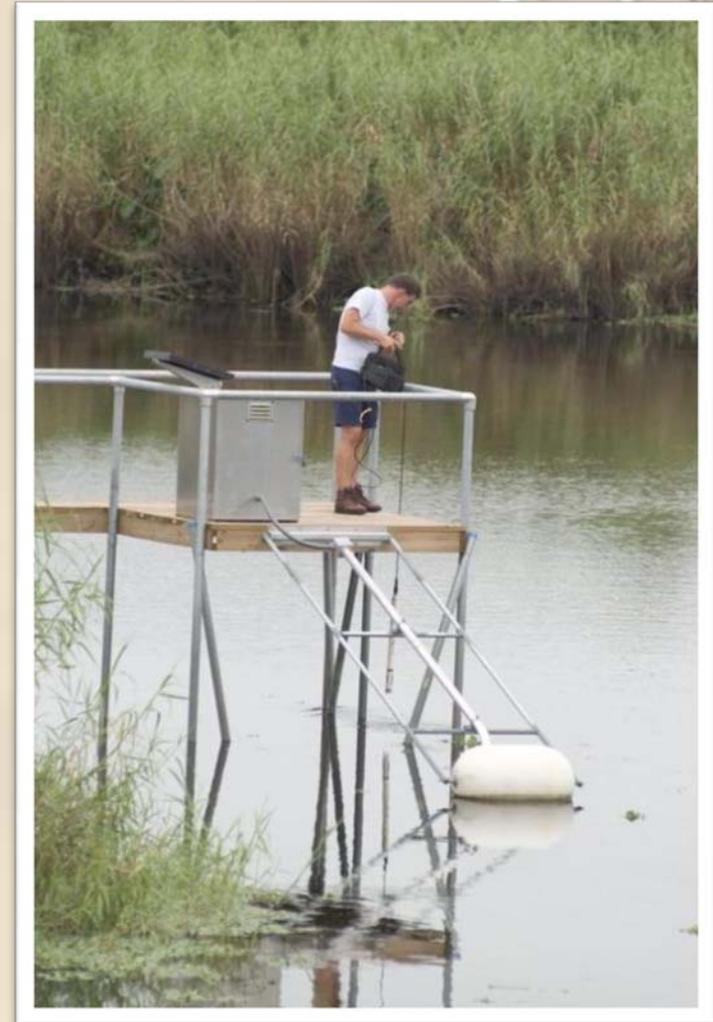
# STA/BMP Performance



- ✓ Achieved 71% phosphorus reduction in EAA
- ✓ Reduced phosphorus in C-139 Basin by more than 15 metric tons
- ✓ Current STA quarterly phosphorus concentration outflows less than or equal to period of record performance

# Water Quality Monitoring

- ▶ Collected 38,260 water quality samples supporting 83 projects/studies
- ▶ Conducted 263,262 water quality data analyses
- ▶ Optimized 5 monitoring networks resulting in reduction of sampling frequency and/or parameters at 92 stations and elimination of 137 redundant/low priority stations



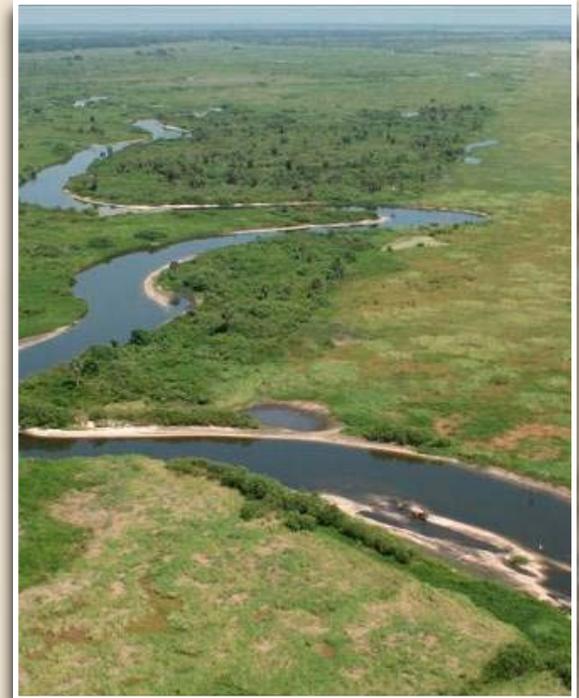
# Dispersed Water Management

- ✓ Increased water storage by 6,855 acre-feet
- ▶ Awarded first Northern Everglades Payment for Environmental Services contracts; eight agreements with private landowners
- ▶ Finalized assessment of water farming on agricultural lands in St. Lucie River Estuary Watershed



# Kissimmee Watershed

- ▶ Corps of Engineers initiated Reach 3 backfilling and S-65EX1 spillway construction
- ▶ Completed construction: S-68X spillway, S-65D grade control structures, C-37 dredging, Three Lakes G-111 replacement, Pool D oxbow excavations
- ▶ Ongoing projects – S-65D boat ramp, S-67 structure erosion repair, River Acres flood protection, and CSX railroad bridge modifications
- ▶ Completed final draft update of Kissimmee River Restoration Evaluation Plan; completed Phase II/III baseline monitoring



# Lake Okeechobee



- ▶ Planted more than 5,000 cypress, pond apple and red maple trees in Lakes Okeechobee and Istokpoga
- ▶ Initiated Lemkin Creek pilot project and study to enhance apple snail population
- ▶ Completed in-lake modeling for hydrodynamic and sediment impact analysis of Harney Pond Canal enhancement

# Coastal Watersheds



- ▶ **Completed updates to St. Lucie and Caloosahatchee River Watershed Protection Plans**
- ▶ **Coordinated with local governments and administered programs to implement 23 local restoration, habitat and water quality improvement projects**
- ▶ **Completed 7 field mapping surveys of Caloosahatchee Estuary**

# Land Stewardship and Invasive Species Management



- ✓ Treated 32,400 acres of upland & aquatic invasive vegetation within conservation areas and STAs
- ✓ Conducted 21 prescribed burns; more than 12,000 acres
  - ▶ Released and monitored four biocontrols for melaleuca and Old World climbing fern
  - ▶ Managed 67 leases; generated \$4 million in District revenue
  - ▶ Removed 1,000 feral hogs and 122 Burmese pythons in cooperation with FWC

# Recreation on Public Lands



- ▶ Utilized 8,470 volunteer hours; estimated value of \$184,561
- ▶ Issued more than 1,600 special use licenses to facilitate camping and equestrian activities
- ▶ Opened 4 new properties to expand hunting and recreation
- ▶ Completed construction of Lake Kissimmee boat ramp

# Environmental Resource Permitting

- ✓ Processed 1,925 new applications
- ✓ Issued 1,966 permits within 38 days (median) / 119 days (average)
  - ✓ 36 days(median) / 45 days(average), excluding time with applicant and under legal challenge
- ✓ Completed 13,076 compliance inspections
- ▶ Continued regulatory streamlining and consistency efforts with DEP
- ▶ Implemented new web-based Environmental Resource General Permit for small projects

# **Core Mission: Water Supply**

**Terrie Bates, Division Director  
Water Resources**

# Water Supply

*You directed us to:*

**GOVERNING BOARD  
PRIORITY**

- ▶ Meet the current and future demands of water users and the environment by:
  - ▶ Developing and implementing regional water supply plans in coordination with local governments
  - ▶ Using water reservation and minimum flow & level authorities to protect water for natural systems
  - ▶ Supporting implementation of alternative water supply development and water conservation
  - ▶ Utilizing regulatory permitting and compliance authority

# Water Supply Planning and Coordination

- ▶ **Completed Lower West Coast Water Supply Plan**
- ▶ **Initiated Lower East Coast and Kissimmee Basin Water Supply planning efforts**
- ▶ **Continued modeling and assessment efforts toward Central Florida Water Initiative Regional Water Supply Plan**
- ▶ **Completed technical analysis for C-51 Reservoir Feasibility Study**
- ▶ **Completed four technical reports on aquifer evaluations**



# Water Supply Planning and Coordination

- ▶ **Coordinated reviews on 560 external projects including:**
  - ▶ **State Clearinghouse Reviews**
  - ▶ **Proposed and Adopted Comprehensive Plan Amendments**
  - ▶ **Developments of Regional Impact**
  - ▶ **Power Plant Siting Act Reviews**
  - ▶ **Transmission Siting Act Reviews**
- ▶ **Water Supply Facility Work Plans**
  - ▶ **Provided technical assistance to local governments; in particular, those located within the Upper East Coast Regional Water Supply region**

# Water Supply Planning and Coordination

- ✓ Quantity and percentage of the 2010-2030 Public Water Supply increase in demand that has been met

Region	Projected Increase in Utility Demand 2010-2030 (MGD)	Quantity of Water Available Now Above 2010 Demand (MGD)	Percentage of Increase Currently Met
Upper East Coast	43.2	34.3	79%
Lower East Coast	136.1	129.8	95%
Lower West Coast	63.8	47.4	74%
Kissimmee Basin	145.8	97.1	67%
District-Wide	389.0	308.6	79%

# Alternative Water Supply/ Water Conservation

- ✓ Met 91% of earned value targets for implementation of alternative water supply development and water conservation projects
- ▶ Provided funding assistance toward 7 AWS projects and 9 WaterSIP projects expected to result in:
  - ▶ 17.8 MGD of alternative water supply capacity created
  - ▶ 43.8 MG of water conserved



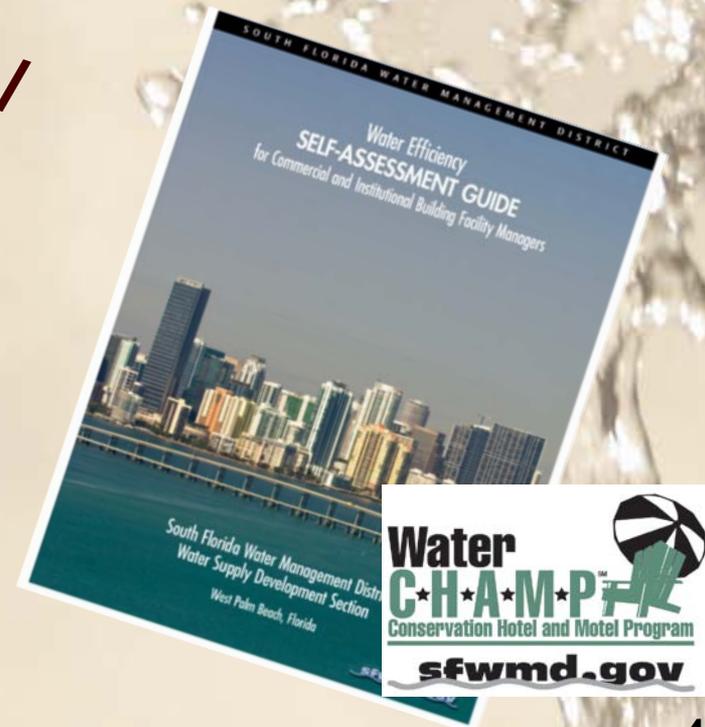
# Alternative Water Supply/ Water Conservation

## WaterCHAMP

- ▶ Expanded into Martin & St. Lucie counties
  - ▶ New partnership agreements with 4 utilities
  - ▶ New promotional support agreements with 4 tourism associations
- ▶ District-wide: 40 properties/  
2,500 rooms

## Commercial/Institutional Self-Assessment Guide

- ▶ Partnered with Broward County public schools to implement use of the guide



# Water Use Permitting

- ✓ Processed 1,487 applications
- ✓ Issued 1,631 permits within 41 days (median) / 200 days (average)
  - ✓ 36 days (median) / 48 days (average), excluding time with applicant and legal challenge
- ✓ Completed 8,088 compliance inspections
- ✓ ePermitting
  - ✓ Received 32% Water Use and ERP applications electronically, up from 20% in FY11
  - ✓ Completed enhancements including Google Earth capability and improved water use application

*[sfwmd.gov/ePermitting](http://sfwmd.gov/ePermitting)*



# Mission Support

**Doug Bergstrom, Division Director  
Administrative Services**

# Mission Support

*You directed us to:*

**GOVERNING BOARD  
PRIORITY**

- ▶ Ensure South Florida's taxpayers receive efficient and effective customer service by:
  - ▶ Focusing resources on core functions, minimizing administrative costs and measuring performance
  - ▶ Streamlining operations and achieving consistency across water management district boundaries
  - ▶ Ensuring accountability, transparency and public involvement in agency decisions
  - ▶ Employing and developing a high-quality, diverse workforce

# Budget & Finance

- ▶ Updated five year Strategic Plan and Capital Improvement Program
- ▶ Completed budgets in compliance with new statutory guidance (FY12 & FY13)
- ▶ Completed financing plan for Restoration Strategies water quality projects
- ▶ Successfully implemented new fund balance accountability standards
- ▶ Received Certificate of Excellence for Financial Reporting
- ✓ Mission Support/Outreach expenses 9% of FY12 budget (Target < 15%)

# Procurement

- ▶ Revised procurement policy as part of consistency efforts with other WMDs
- ▶ 5,220 purchase order encumbrance transactions; average of 16 per day
- ▶ 25% of total procurement dollars awarded to SBEs (w/o land purchases)
- ▶ 34,495 invoice/payment transactions executed; average of 18 days to process payment
- ✓ Contract negotiations resulted in cost avoidance of \$8.9 million

# Open Government and Public Outreach

- ✓ 619 public records requests processed; 92% closed within 14 days
- ▶ Conducted 55 Governing Board, WRAC and monthly regulatory meetings
- ▶ Expanded website to engage public in key topics - Tropical Storm Isaac response, Restoration Strategies, land lease policy changes



The image shows a meeting room with a large wooden conference table. Several people are seated around the table. In the background, there is a large screen displaying a map of Florida. An American flag is visible on the left side of the room.



The screenshot shows the website for the South Florida Water Management District. The main heading is "Tropical Storm Isaac: Readiness, Response, Recovery". The page includes a "RELATED LINKS" section with items like "News Releases and Photo Gallery", "Frequently Asked Questions and Fact Sheets", and "Presentations and Maps". There is also a "NEWS ARCHIVE" section and a "Related Contacts" section.

# Information Technology

- ▶ Realized savings of \$235,000 through audit of District's landline and data lines
- ▶ Implemented ePayables to pay vendors quicker and generate discounts
- ▶ Continue to transition work from contractors to FTEs
- ✓ 98% IT Help Desk Customer Satisfaction polling (Target > 96%)
- ✓ 100% availability of IT Critical Systems (Target >99.9%)

# Human Resources

- ✓ 7% turnover rate (Target <6%)
- ✓ 97% of new hires successfully completed introductory period (Target >90%)
- ▶ 109 training courses offered; focused on mission critical functions
- ▶ Saved approximately \$1.7 million by introducing new Open Access insurance plan



# Office of Counsel

- ▶ **Reduced outside counsel expenditures by 86% over prior year**
- ▶ **Represented the District in more than 100 civil and administrative cases**
- ▶ **Prevailed in two inverse condemnation cases (71 total Plaintiffs)**
- ▶ **Focused on preventative law to avert future litigation**

# WMD Consistency Efforts

- ▶ Collaborated with DEP and other WMDs to complete consistency review efforts
  - ▶ Procurement and Reserves policies
  - ▶ Fleet/IT equipment replacement criteria
  - ▶ Education reimbursement and general benefits
- ▶ Established standardized metrics; quarterly reports on both projects and processes
  - ▶ Ongoing effort to refine and automate process metrics

# Looking Ahead

Melissa Meeker, Executive Director

# Looking Ahead

- ▶ **Flood Control**
  - ▶ **Capital refurbishment projects**
  - ▶ **East Coast Protective Levee Certification**
  - ▶ **TS Isaac After Action Implementation**
  - ▶ **Land Assessment Process**
- ▶ **Natural Systems/Water Quality**
  - ▶ **Central Everglades Planning Project**
  - ▶ **Restoration Strategies Science Plan**
  - ▶ **STA1E Expansion land exchange**
  - ▶ **Biscayne Bay and Caloosahatchee Reservation Rules completion**

# Looking ahead

- ▶ **Water Supply**
  - ▶ CUPcon Initiative
  - ▶ Lower East Coast Water Supply Plan Update
  - ▶ Central Florida Water Initiative
- ▶ **Mission Support**
  - ▶ Continued Enhancements to ePermitting
  - ▶ Legal matters
    - ▶ FEMA Deobligation
    - ▶ USA/Restoration Strategies
    - ▶ EAA Permit Challenges

**Thanks to the Board and Staff  
for Another Great Year!**