

# Palm Beach County Water Resources Task Force

## 2013 Lower East Coast Water Supply Plan Update



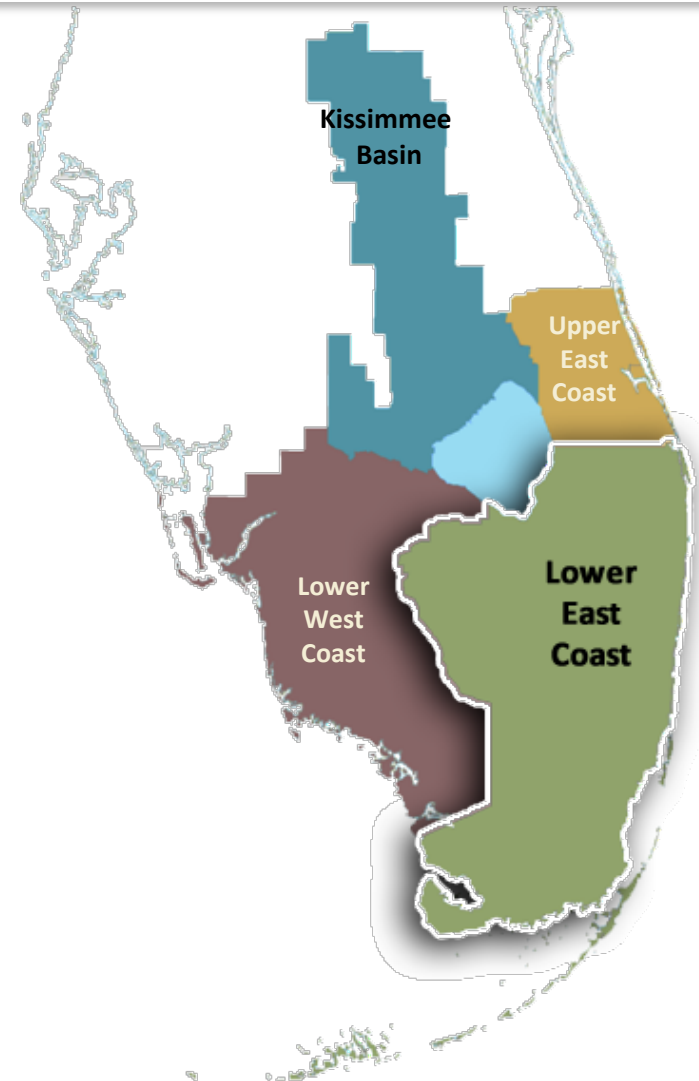
**Mark Elsner, P.E.**  
Section Administrator  
Water Supply Development

**July 25, 2013**



# What is a Regional Water Supply Plan?

- ▶ **Current and future look at water needs**
- ▶ **Strategies and sources to meet future water demands and the needs of the environment**
- ▶ **Based on at least a 20-year future planning horizon**
- ▶ **Updated every 5 years**
- ▶ **Local governments required to respond with updates to water facilities element of comprehensive plan**



# Public Participation

- ▶ **Water Resources Advisory Commission (WRAC)**
  - ▶ Serves as overall forum
- ▶ **Five WRAC Issues Workshops held to date**
- ▶ **Meetings held with stakeholders, local governments and utilities**
- ▶ **Contacted/presentations to local governments and other entities**
- ▶ **Draft LEC documents distributed/posted June 5**
  - ▶ Discussed at: WRAC meeting on June 6
  - Stakeholder meeting on June 27
  - Governing Board on July 11
  - Other local forums



# LEC Planning Area

## Planning Horizon 2010 – 2030

### ► Population:

- 2010      5,637,725
  - 2030      6,666,866 (projected)
- 18% population increase*

### ► Irrigated agricultural acreage:

- 2010      575,316
  - 2030      575,897
- Slight increase (< 1%) in ag acres*

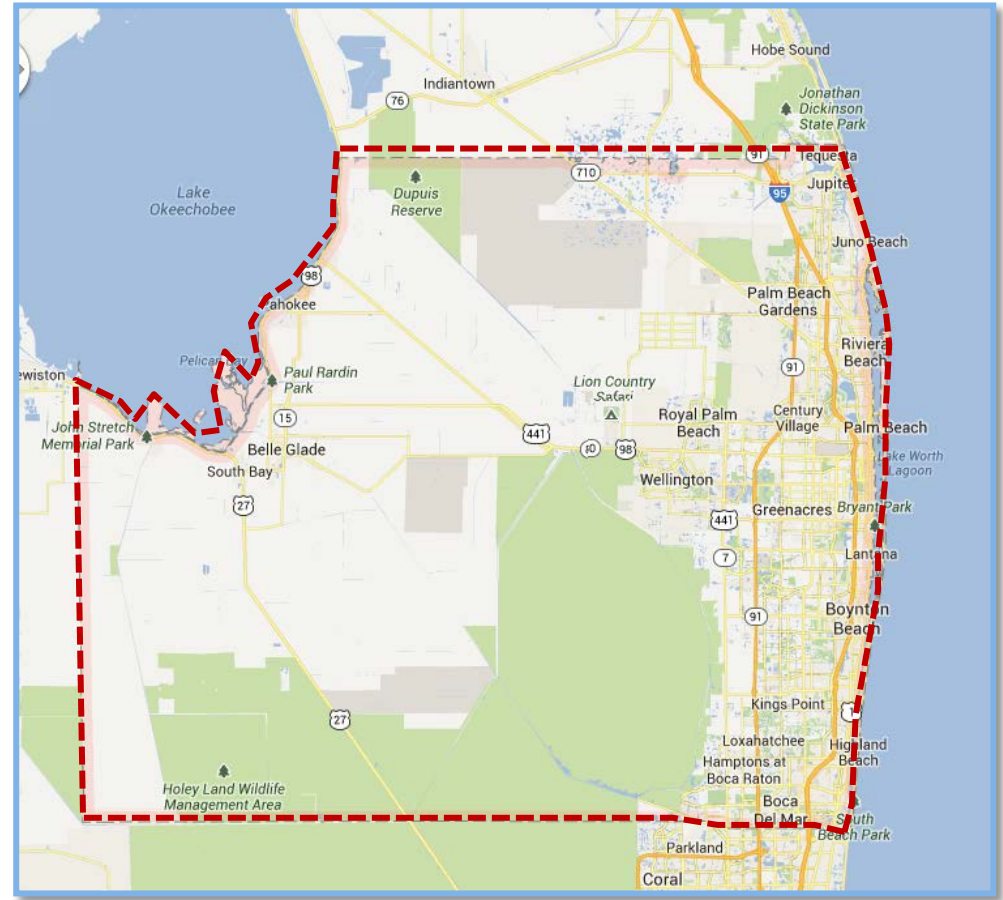
### ► Gross water demands:

- 2010      1,719 MGD
  - 2030      1,933 MGD
- 12% water demand increase*

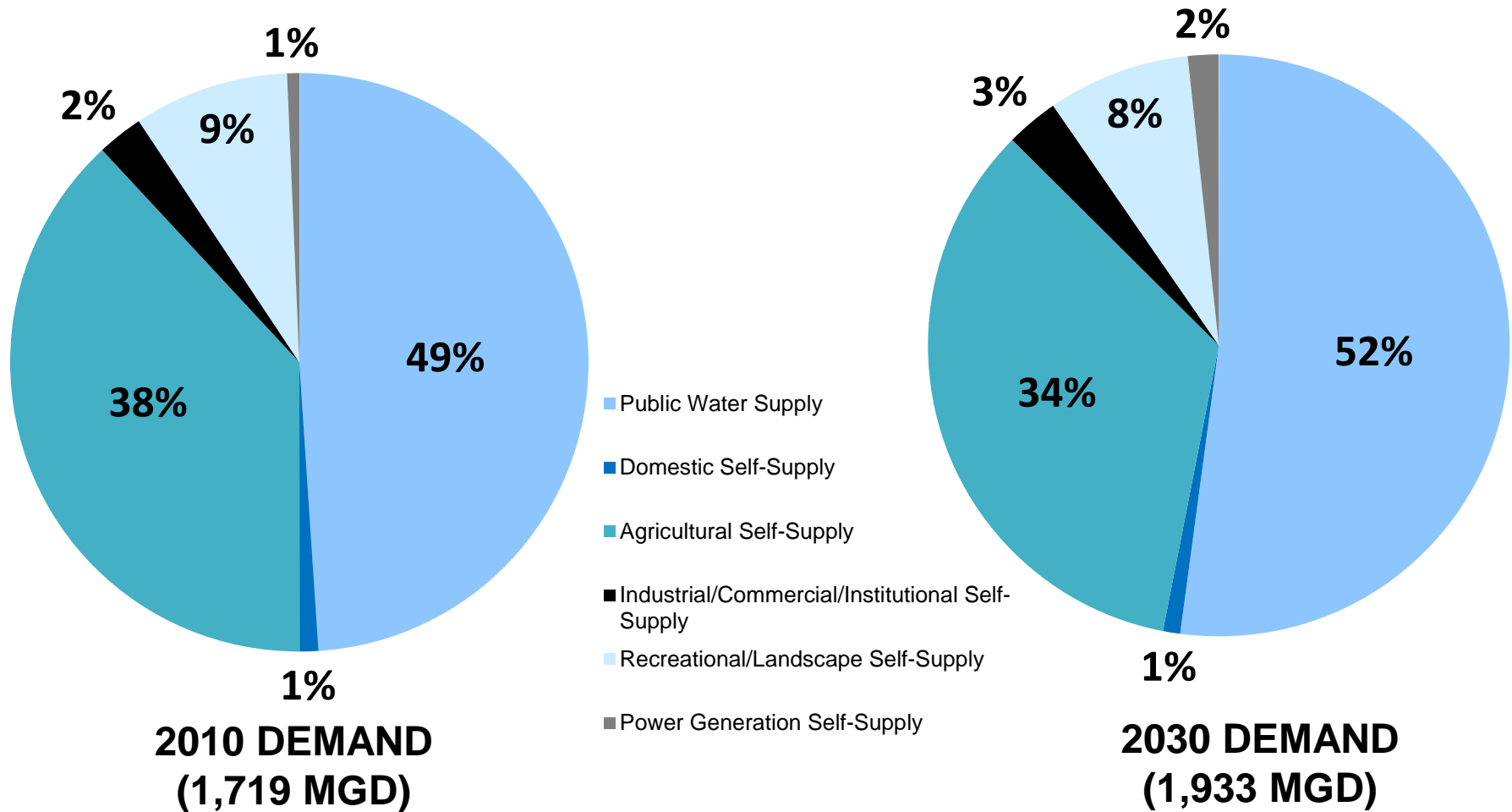


# Palm Beach County

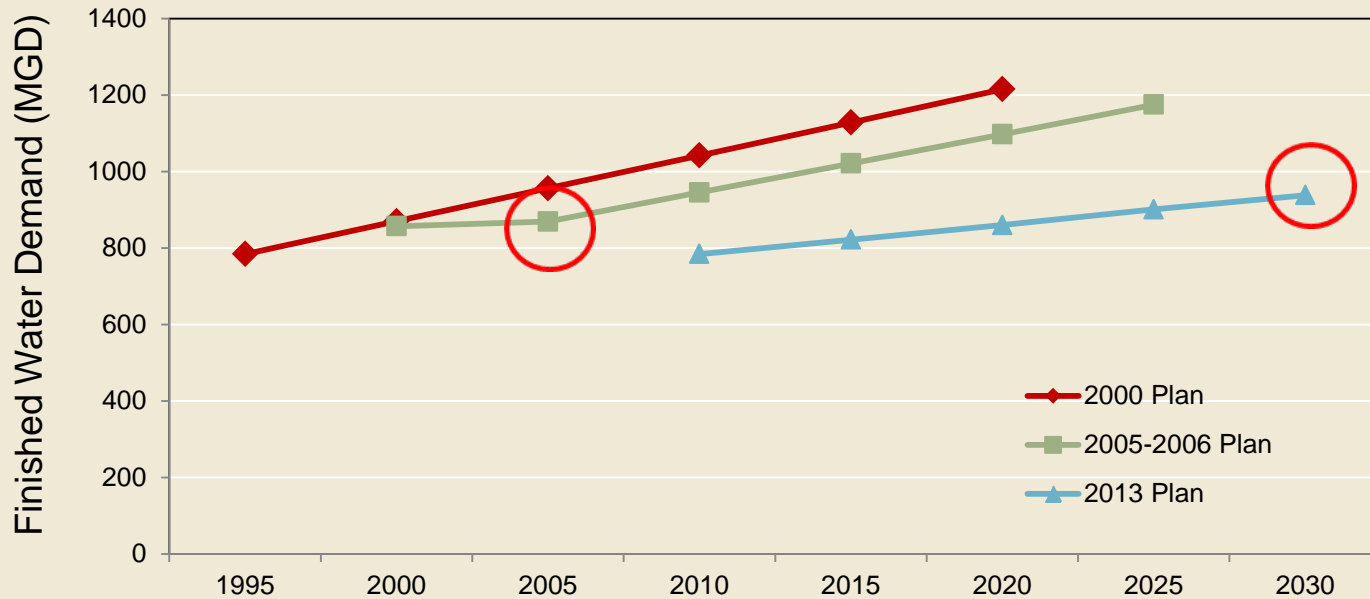
- ▶ **Population:**
  - 2010 1,320,134
  - 2030 1,648,000 (projected)  
*25% population increase*
  
- ▶ **Irrigated agricultural acreage:**
  - 2010 445,799
  - 2030 446,972  
*Slight increase (< 1%) in ag acres*
  
- ▶ **Gross water demands:**
  - 2010 793 MGD
  - 2030 852 MGD  
*7% water demand increase*



# 2010 & 2030 Percentage of Use by Water Use Category

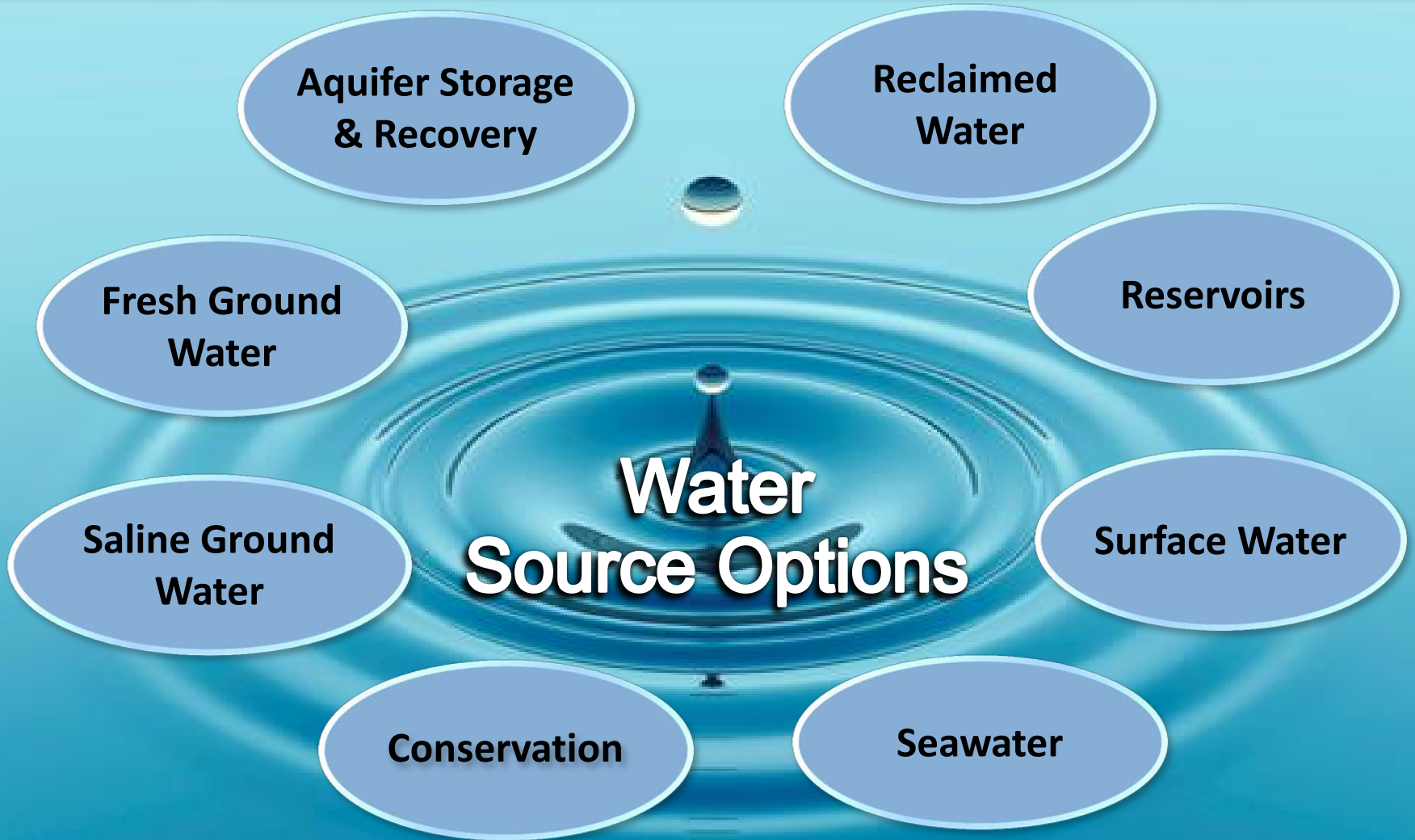


# History of Public Water Supply Demand Projections (Finished Water)



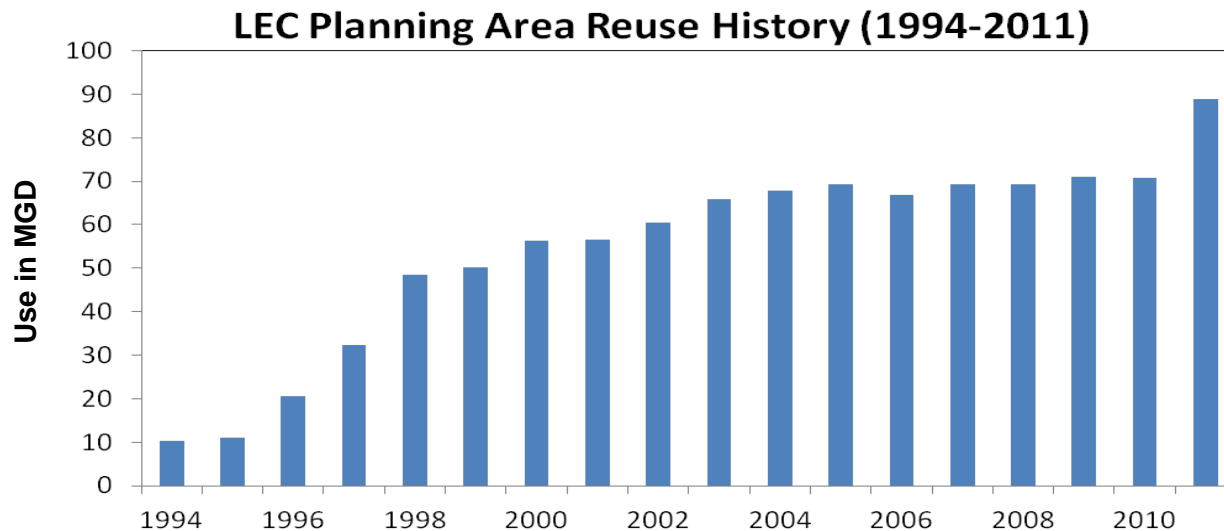
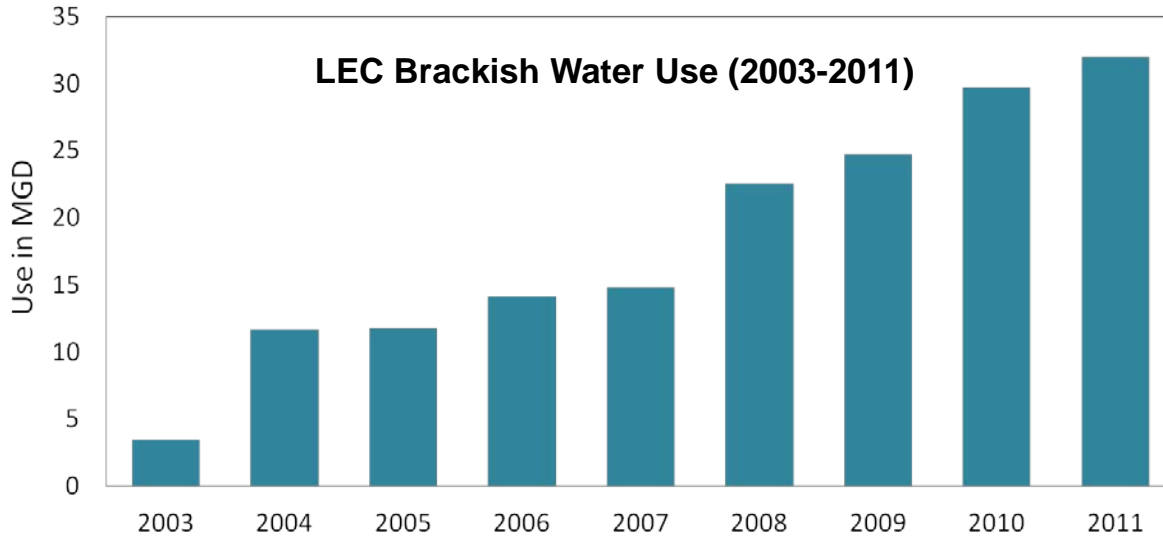
Plan Year	1995	2000	2005	2010	2015	2020	2025	2030
2000 Plan	784	870	956	1,042	1,128	1,215		
2005 Plan		857	869	945	1,021	1,097	1,175	
2013 Plan				784	822	860	901	938

# Water Source Options





# Reuse & Brackish Water Development in LEC



# How Will 2030 Demands Be Met? (PWS, Ag and Rec/Landscaping)

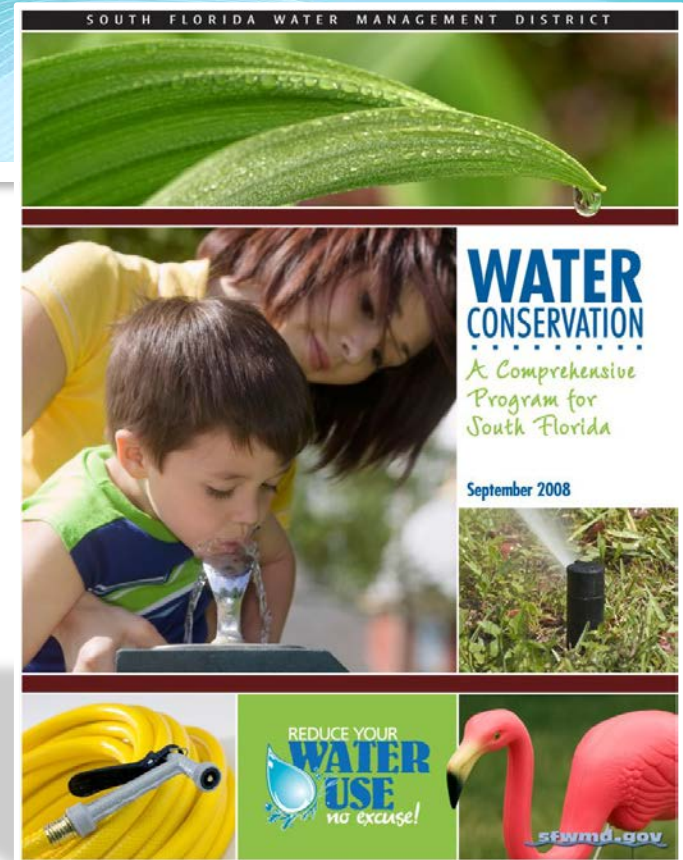
Category	Surface Water	Fresh Groundwater	Brackish Groundwater	Reclaimed Water	Storage	Conservation
Public Water Supply		✓	✓		✓	✓
Agricultural Irrigation	✓	✓				✓
Recreation/ Landscape Irrigation	✓	✓		✓		✓



# Conservation

- ▶ Year-round rule savings
- ▶ All water sources should be used efficiently by all users

*The cheapest gallon of water is the gallon we don't use*



PWS Water Year (Water Supply Plan) (gallons per capita per day)	1995 (2000 Plan)	2000 (2006 Plan)	2005 (2006 Plan)	2010 (2013 Plan)
LEC Planning Area	184	176	163	142
Palm Beach County	216	219	203	166

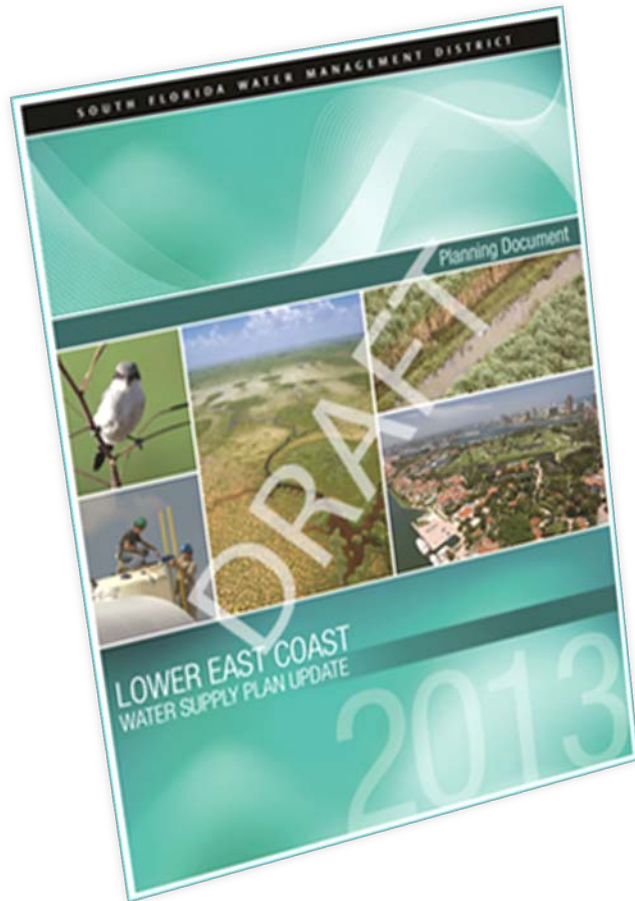
# Environmental Water Needs



- ▶ **Implementation of CERP and other projects**
- ▶ **Regulatory protection of water resources**
  - Water Use Permitting Program
  - Minimum Flows and Levels\*
  - Water Reservations
  - Restricted Allocation Area Rules
  - Water Shortage Criteria

*\* Recovery & prevention strategies rely on CERP implementation*

# Conclusion



The future water demands of the region can be met through the 2030 planning horizon with appropriate management, conservation and implementation of projects in this Plan

## Dependent on completion of:

- ▶ Water supply development projects by 7 utilities
- ▶ Completion of USACE Herbert Hoover Dike Rehabilitation Project and subsequent revision to the Lake Okeechobee regulation schedule
- ▶ CERP and other projects to meet environmental needs

# Future Direction (Excerpts)

- ▶ **Continue aquifer monitoring program**
- ▶ **Construct CERP and related projects**
- ▶ **Promote local storage projects**
- ▶ **Continue to evaluate the feasibility of the C-51 Reservoir Project**
- ▶ **Promote water reuse and conservation measures**
- ▶ **Identify the potential impact of sea level rise on utilities and other users**
- ▶ **Complete East Coast Floridan Model**
- ▶ **Coordinate with local governments and utilities on water supply related elements**



# Requirement: Link Land Use and Water Supply Planning (Ch 163, F.S.)



## After the District updates the water supply plan:

- ▶ All local governments must amend their comprehensive plan to incorporate a water supply facilities work plan within 18 months of water supply plan update
- ▶ Utilities identify the projects to be developed
- ▶ Utility Annual Progress Reports

# 2013 LEC Plan Update Documents

The screenshot displays the website's navigation menu and a main content area. The navigation menu includes: Home, About Us, Managing & Protecting Water, Protecting & Restoring Ecosystems, News, Library & Multimedia, Residents & Visitors, Businesses, Scientists & Engineers, Educators & Students, Topics, and Regions. The main content area features a large image of a coastal city with a map overlay of the Lower East Coast region. Below the image is the title "Lower East Coast Water Supply Plan" and a "VIEW LARGER" button. To the left, a "RELATED LINKS" sidebar lists various documents and reports. The main text area contains a heading for a workshop, a paragraph about the plan update, and a section for draft documents. On the right, there are sections for "In the News" and "Upcoming Events".

**RELATED LINKS**

- ▶ About Water Supply Planning
- ▶ Lower East Coast Water Supply Plans
- ▶ Alternative Water Supply
- ▶ Water Supply Facilities Work Plan Support
- ▶ Intergovernmental Programs: Linking Land and Water
- ▶ C-51 Reservoir Partnership Study
- ▶ Where does our drinking water come from? [PDF]
- ▶ Water Conservation
- ▶ Water Resources Advisory Commission (WRAC)
- ▶ Past Lower East Coast Water Supply Plans
- ▶ Public Workshops

**The next WRAC Issues Workshop will be held on June 27, 2013. more »**

The Lower East Coast Water Supply Planning Area includes Palm Beach, Broward, Miami-Dade and parts of Monroe, Collier and Hendry counties. The SFWMD is developing the 2013 Lower East Coast Water Supply Plan Update to assess projected water demands and Water Supply Plan Update to assess projected water demands and update will be used by local governments, water users and utilities to update and modify local comprehensive plans, facility work plans and ordinances. Check this page for upcoming workshop information. more »

**DRAFT 2013 LOWER EAST COAST (LEC) WATER SUPPLY PLAN UPDATE**

- ▶ Planning Document [PDF]
- ▶ Appendices [PDF]

**REGIONAL MODEL RESULTS**

- ▶ Support Information
- ▶ Performance Measure Graphics

**In the News**

- ▶ Purple Prevails During Water Reuse Week (May 22)
- ▶ SFWMD Water Levels Positioned Well for NWS Forecast of Average 'Wet Season (May 16)
- ▶ South Florida Sees 2nd Wettest April Since 1997 (May 01)
- ▶ Florida Water Star Shines in South Florida (Apr 30)
- ▶ SFWMD Expo Focuses on Efficient Water Use for Facilities (Apr 12)

**Upcoming Events**

- ▶ Land Assessment Public Workshop: Everglades Region - June 26
- ▶ Florida Water Star Accredited Professional Training for Irrigation and Landscape Professionals (4 CEU hours for FNGLA), June 12-13, West Palm Beach
- ▶ Workshop: Understanding How Building Codes Can Increase Water Use Efficiency: June 27, Miami

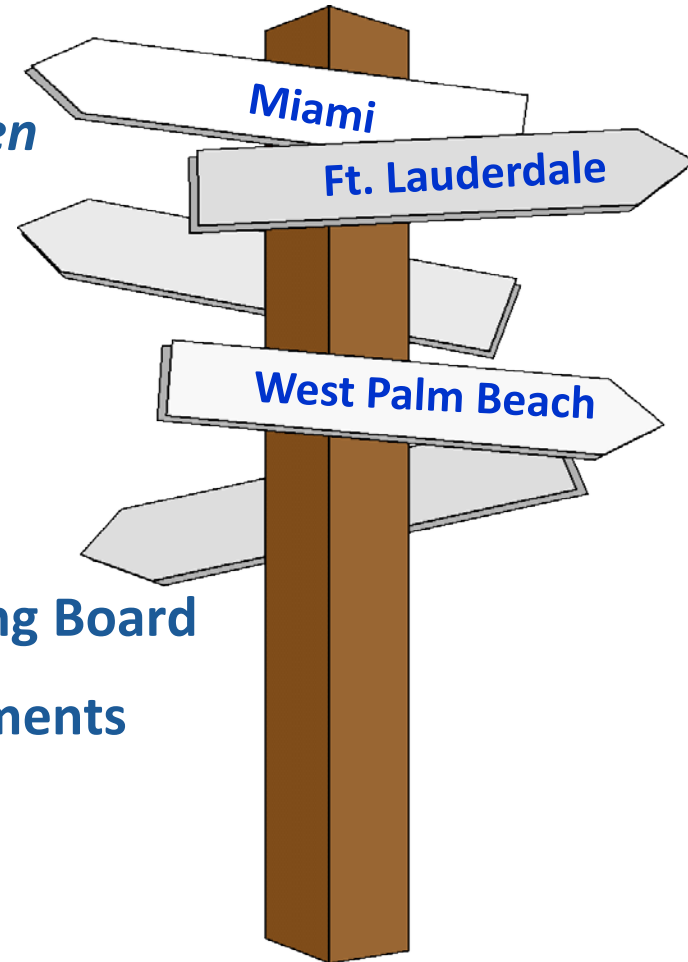
- ▶ Further information including LEC Plan documents, can be found at:

[www.sfwmd.gov/watersupply](http://www.sfwmd.gov/watersupply)



# What's Next?

- |                  |   |
|------------------|---|
| <b>July 26</b>   | <b>Comment period ends – <i>written comments to Brenda Mills (bmills@sfwmd.gov)</i></b> |
| <b>August</b>    | <b>Sixth Stakeholder Workshop (if necessary)</b>  |
| <b>Sept 5</b>    | <b>Final Plan to SFWMD WRAC</b>   |
| <b>Sept 12</b>   | <b>Final Plan to SFWMD Governing Board</b>  |
| <b>June-Sept</b> | <b>Presentations to local governments and others</b>                                    |



# QUESTIONS?

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Water Supply Plan Update

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