



# Upper East Coast Water Supply Plan Water Source Options

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# UEC Demands and Projections

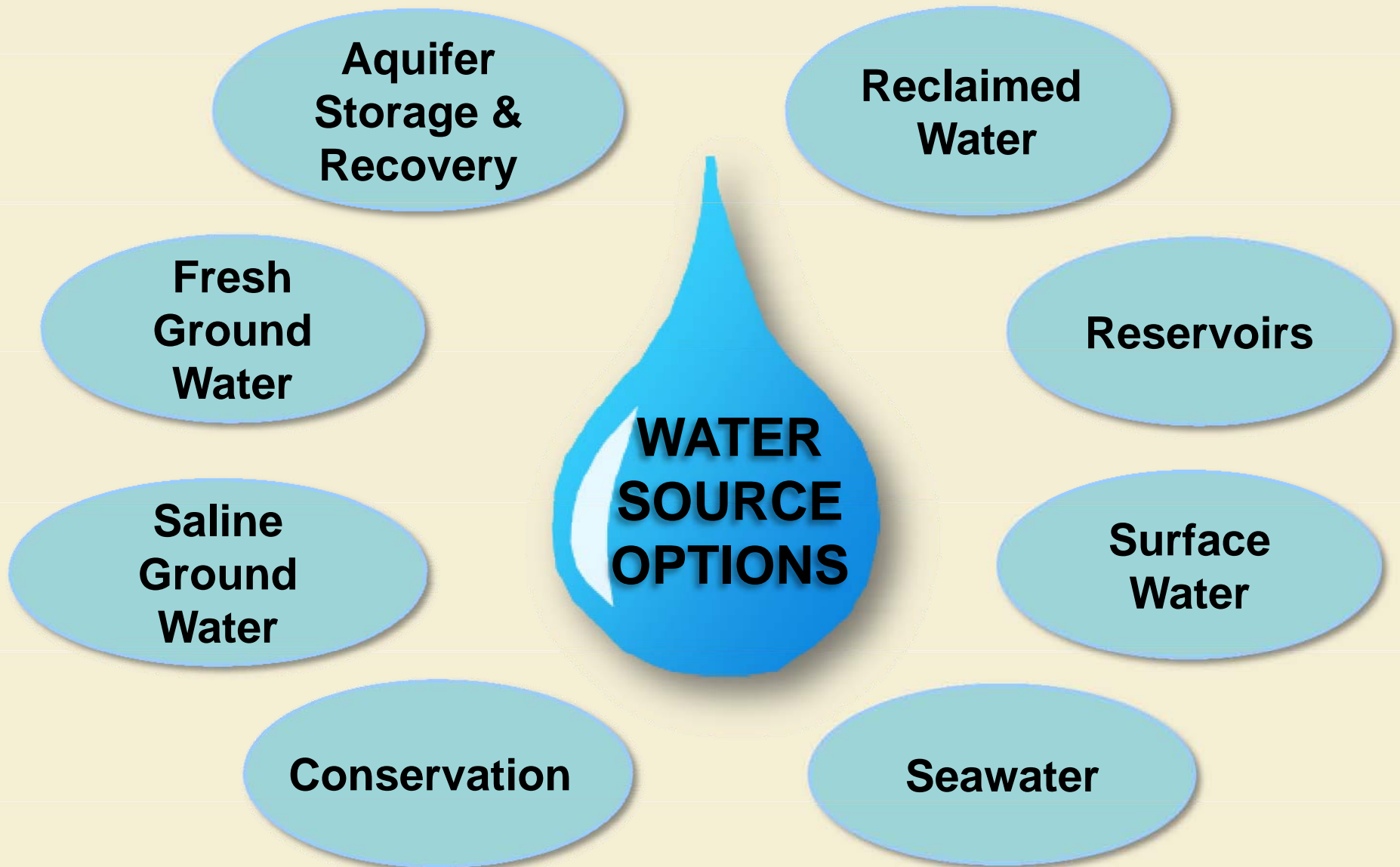
Category	Estimated	2004/2006 UEC	2011 Draft UEC
	2005 (MGD)	2025 (MGD)	2030 (MGD)
Agriculture Self-Supply	164	197.1	120
Public Water Supply	44.9	101.9	95.7
Domestic Self-Supply	4.6	2.7	1.3
Recreation and Landscape Self-Supply	16.9	23.8	46.5
Power Generation Self-Supply	17.4	47.6	51.3
Commercial and Industrial Self-Supply	6.7	4.9	9.4
Total Planning Area	254.5	378	324.2

# Water Supply Issues

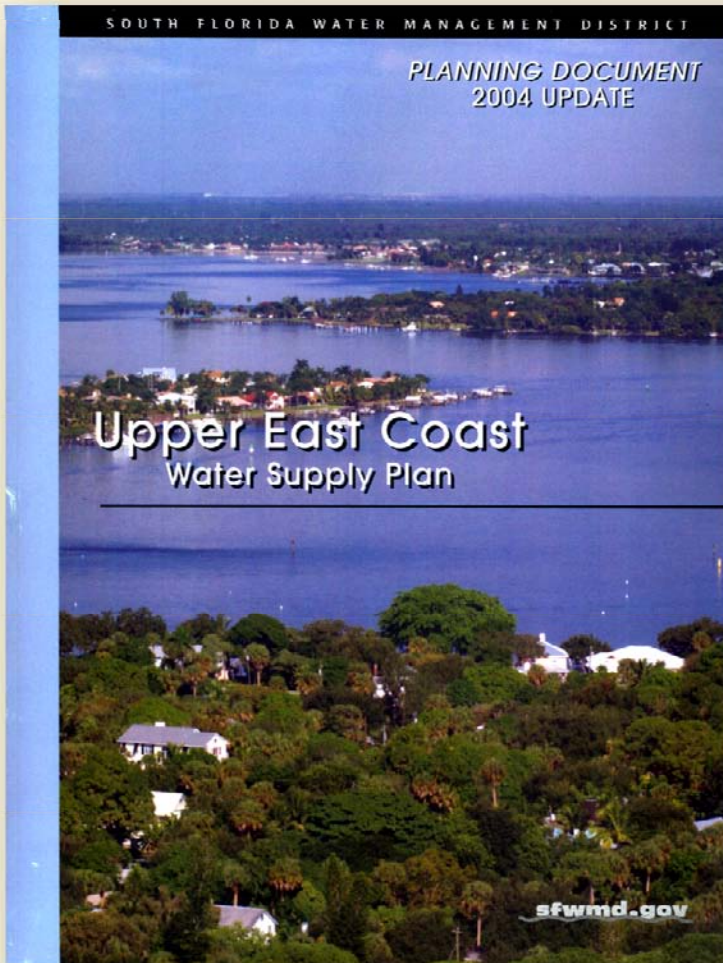
- **Increases in withdrawals from Surficial Aquifer limited**
  - Wetlands
  - Salt water intrusion
- **Surface water availability (storage) limited**
- **Fresh water discharges affecting health of coastal resources**
  - Timing
  - Volume



# Water Source Options



# 2004 Upper East Coast Water Supply Plan



## Plan Conclusion

The needs of the region can continue to be met with **appropriate management and diversification** of water supply sources through 2025.

### ■ UEC Region Progress

- 75% of water treatment capacity is reverse osmosis using Floridan Aquifer
- 41% of wastewater is reused

# Public Water Supply – 2004 UECWSP for 2025

- **Public Water Supply**
  - Continued use of **Surficial aquifer**
  - Fresh water aquifer withdrawals maximized
    - No additional water available in coastal areas
  - Increased use of **Floridan Aquifer**
  - Look for opportunities for increased efficiency through water **conservation**



# Landscape Irrigation – 2004 UECWSP for 2025

- **Landscape Irrigation**
  - Continued use of **Surficial aquifer**
  - Fresh water aquifers withdrawals maximized
    - No additional water available in coastal areas
  - Increased use of **reclaimed water**, especially in areas where fresh water aquifers are maximized
  - Look for opportunities for increased efficiency through water **conservation**



# Agricultural Irrigation – 2004 UECWSP for 2025

- **Agricultural Irrigation**
  - UEC - Continued use of **surface water** as primary source & **Floridan aquifer** as supplemental source
  - Increases in **storage** via CERP project and other options should enhance surface water availability
  - Look for opportunities for increased efficiency through water **conservation** and Best Management Practices (BMPs) Program
  - Stormwater retention/tailwater recovery where possible



# Natural Resources – 2004 UECWSP for 2025

- **Natural Resources**
  - Implementation of surface water **storage** projects will improve water resource management
    - CERP Indian River Lagoon - South
    - Ten-Mile Creek Critical Restoration Project
  - Established **Minimum Flows and Levels** to protect resources from significant harm



# UECWSP Selected Per Capitas

Plan/Base Year Used	1998 Plan (1990)	2004 Plan (2000)	2011 Plan (2005)
Port St. Lucie	120	109	104
Ft. Pierce	173	152	116
Martin County	176	183	129
South Martin Regional	327	268	175
Indiantown	230	133	125
Stuart	243	217	200
UEC Planning Area	186	167	123

# Conservation

## Public Water Supply

- Utility specific projects
- Year-round rule savings
- Conservation potential
  - Use Conserve Florida EZ Guide
- Case studies
  - Cost of Conservation vs other sources
  - Utility highlights



# Conservation (continued)

## Golf Courses

- Inventory courses and irrigated acreages
  - Existing conservation measures
  - Irrigation controllers



## Agriculture

- Enrollment in Indian River Citrus BMP Program & implementation



# Reclaimed Water

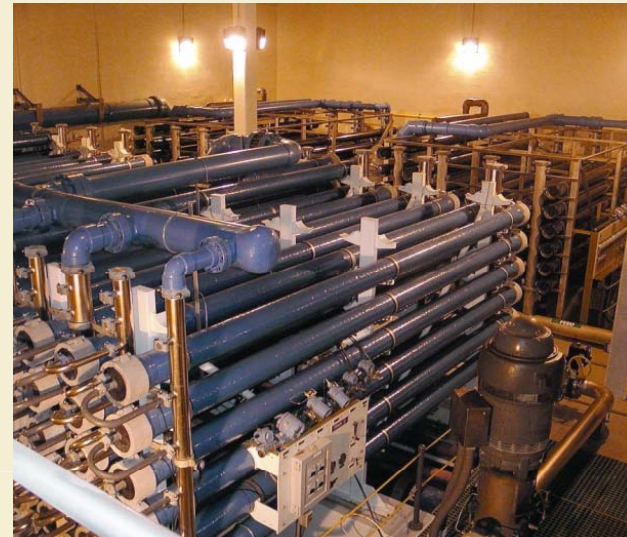
**Partner with wastewater utilities to:**

- **Estimate potential reclaimed water availability in 2030**
- **Identify current flows, uses and location of facilities**
- **Identify future flows, uses and projects**
- **Inventory existing, or the need for, local ordinances requiring the use of reclaimed water**
- **Efficiency**



# Floridan Aquifer

- Review previous UECWSPs & analysis
- Review current water use permits
- Review water quality data



# Questions

