

2004 Upper East Coast Water Supply Plan Update Overview

*Mark Elsner, P.E., Director
Water Supply Development Division*



PLANNING DOCUMENT
2004 UPDATE

Upper East Coast
Water Supply Plan

sfwmd.gov

- **Plan Approved June 2004**
- **Planning Horizon 2000 - 2025**
- **Population projected to increase by 165,846 (52%) to 486,510**
- **Agricultural acreage forecast to decrease by 14,677 acres (8%) to 171,186 acres**
- **Overall water demands estimated to increase by 45 MGD (12%) to 337 MGD**

UEC Water Supply Issues

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



Potential impacts with increased surficial aquifer use



Atlantic Ridge Ecosystem

Surface water availability for agricultural use is limited during times of low rainfall



Timing and volume of freshwater discharges impact coastal resources



South Fork of the St. Lucie Estuary

Conservation

**Reclaimed
Water**

**Surficial
Aquifer
System**

**Aquifer
Storage
& Recovery**

Reservoirs

**Water Source
Options**

Surface Water

**Floridan
Aquifer System**

Ocean Water



2004 UEC Water Supply Plan Update Overall Conclusion

The needs of the region can continue to be met with **appropriate management and diversification** of water supply sources during a 1-in-10 year drought condition through 2025.



Conclusions (cont.)



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



Conclusions (cont.)



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

Conclusions (cont.)



- **Agricultural Irrigation**
 - Continued use of **surface water** as primary source
 - Continued use **Floridan aquifer** as supplemental source to surface water
 - 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



Conclusions (cont.)



■ Natural Resources

- Implementation of surface water **storage** projects will improve water resource management
 - CERP Indian River Lagoon - South
 - Ten-Mile Creek Critical Restoration Project
 - Northern Palm Beach County Comprehensive Water Management Plan
 - CERP North Palm Beach County, Part 1
- Established **Minimum Flows and Levels** to protect resources from significant harm



In Closing....

- **Continue to develop alternative water supplies to meet growing water needs**
- **Incorporate use of alternative water supplies, such as reclaimed water, into new developments**
- **Improve water use efficiency through increased water conservation efforts in new construction, as well as retrofit of existing development**
- **Support regional efforts to construct storage to meet water needs of coastal resources**



Discussion

South Florida
Water Management
District Boundaries