# Linking Water Supply & Land Use Planning

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# State Supply Components with





# Linking Growth with Water Availability

Increased focus on alternative water supplies

Improved communication between utilities and planning departments

Strengthened link between water supply plans and land use planning



### Why are Alternative Water Supplies Needed?

- Traditional sources are limited
- Proactive approach to meet future water needs
- Reduce potential impacts on and competition with natural resources
- One time use of water is no longer considered beneficial use







#### Linking Water Supply & Land Use Planning



![](_page_4_Picture_2.jpeg)

# Local Governments Are Required to Respond

 Within 12 months of receiving letter, Local Governments must notify SFWMD:
Which recommended projects will be built
Identify additional projects to replace or supplement recommended projects
Identify quantity of water to be produced
Provide status of implementing projects

![](_page_5_Picture_2.jpeg)

Northwest

Suwannee River

#### A Statewide Perspective (The People)

#### **Florida's Population**

**2005 Population** 

**Projected 2025 Population** 

Projected 2025 District Population

18 million

25 million

10.4 million

![](_page_6_Picture_10.jpeg)

St.

Johns

South Florida

![](_page_6_Picture_12.jpeg)

Northwest

Suwannee River

#### A Statewide Perspective (The Water)

#### Additional Raw Water Needed by 2025

Statewide	2,000 MGD
SFWMD	900 MGD
Upper East Coast	88 MGD

Southwest

St.

Johns

South Florida

![](_page_7_Picture_7.jpeg)

![](_page_8_Figure_0.jpeg)

Four Planning Regions

![](_page_8_Picture_2.jpeg)

# **Population by Region**

![](_page_9_Figure_1.jpeg)

![](_page_9_Picture_2.jpeg)

#### Percent Increase 2025 vs 2005 Population

![](_page_10_Figure_1.jpeg)

![](_page_10_Picture_2.jpeg)

#### Public Water Supply Demands will be 1.9 Billion Gallons Per Day by 2025

	Current Demands	+ New Demands	= Total	
UEC (2000)	36.5	65.4	102 MGD	
Kiss (2000)	114	121	235 MGD	
LEC (2005)	912	375	1,287 MGD	
LWC (2005)	145	127	272 MGD	

![](_page_11_Picture_2.jpeg)

### **UEC Planning Region**

![](_page_12_Figure_1.jpeg)

unter State

2

![](_page_12_Picture_2.jpeg)

#### **UEC Cross Section**

![](_page_13_Figure_1.jpeg)

![](_page_13_Picture_2.jpeg)

# UEC Planning Region Population

![](_page_14_Figure_1.jpeg)

![](_page_14_Picture_2.jpeg)

# **UEC Population**

![](_page_15_Figure_1.jpeg)

![](_page_15_Picture_2.jpeg)

### 2000 & 2025 UEC Water Use Demands

![](_page_16_Figure_1.jpeg)

![](_page_16_Picture_2.jpeg)

#### UEC Public Water Supply Demands will be 81 Million Gallons per Day by 2025

Current UEC Demands		+ New Demands	= Total UEC Future Dem	= Total UEC PWS Future Demands	
St. Lucie	17 MGD	+ 32 MGD			
Martin	~17 MGD	+ 15 MGD		Rung	
keechobee	0 MGD	+ 0 MGD			

![](_page_17_Picture_2.jpeg)

34 MGD

47 MGD

# **Regional Water Supply Plans**

**20-year Planning Period 1-in-10 Level of Certainty** Water Resource Development Region-level Projects Water Supply Development Local-level Projects Minimum Flows and Levels (MFLs) 5-year updates

![](_page_18_Picture_2.jpeg)

![](_page_18_Picture_3.jpeg)

# Consolidated Water Supply Support Document

![](_page_19_Picture_1.jpeg)

![](_page_19_Picture_2.jpeg)

# Why Amend 2004 Plan?

- New state law requirements
- Information for local governments for compliance with new legislation
- Alternative water supply projects become eligible for District's funding
- Population projected for 2025 is 20% higher than it was in 2004 Plan (99,417 more people)

![](_page_20_Picture_5.jpeg)

# Upper East Coast Amendment Outline

#### **Sections**

- 1. Introduction
- 2. Demand Estimates and Projections
- 3. Water Supply Development Projects Utility Summaries

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# Upper East Coast Amendment Appendices

- A: Demand Assessments and Projections
- F: Water Supply Development Projects
- G: Information for Local Government Comprehensive Plans

![](_page_22_Picture_4.jpeg)

#### How Will Future Demands Be Met? Alternative Water Supplies

![](_page_23_Figure_1.jpeg)

ASR – Aquifer storage and recovery

![](_page_23_Picture_3.jpeg)

#### **Future Sources**

#### Focus on Alternative Water Sources & Conservation

- Brackish Groundwater
- Reclaimed Water
- Surface Water
- Storage Options

Limited Traditional Sources
Fresh Groundwater
Fresh Surface Water
(C-23, C-24 & C-25 Basins)

![](_page_24_Picture_7.jpeg)

#### Water Supply Development Projects

Specific water supply projects were added to the Amendment
Projects Included in Amendment

 1 Traditional
 47 AWS (146 MGD)
 14 Brackish and 33 Reclaimed

Eight AWS projects approved for funding in 2006 and 2007

![](_page_25_Picture_2.jpeg)

![](_page_25_Picture_3.jpeg)

![](_page_25_Picture_4.jpeg)

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

![](_page_26_Picture_1.jpeg)

![](_page_26_Picture_2.jpeg)

### **Questions?**