



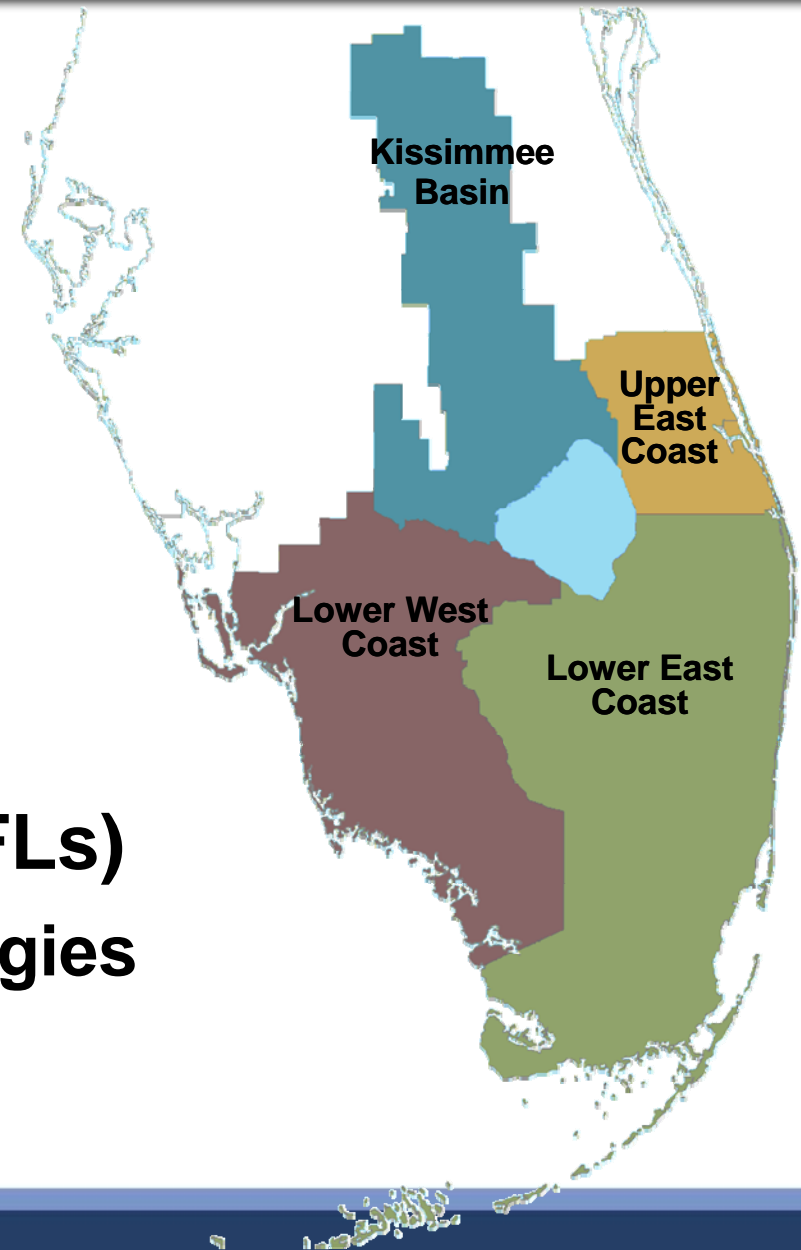
2011 Upper East Coast Water Supply Plan Update

**Mark Elsner, PE, Director
Water Supply Development Division**

**UEC Plan Update – WRAC Issues Workshop # 4
SFWMD Martin/St. Lucie Service Center, Stuart, FL
December 15, 2010**

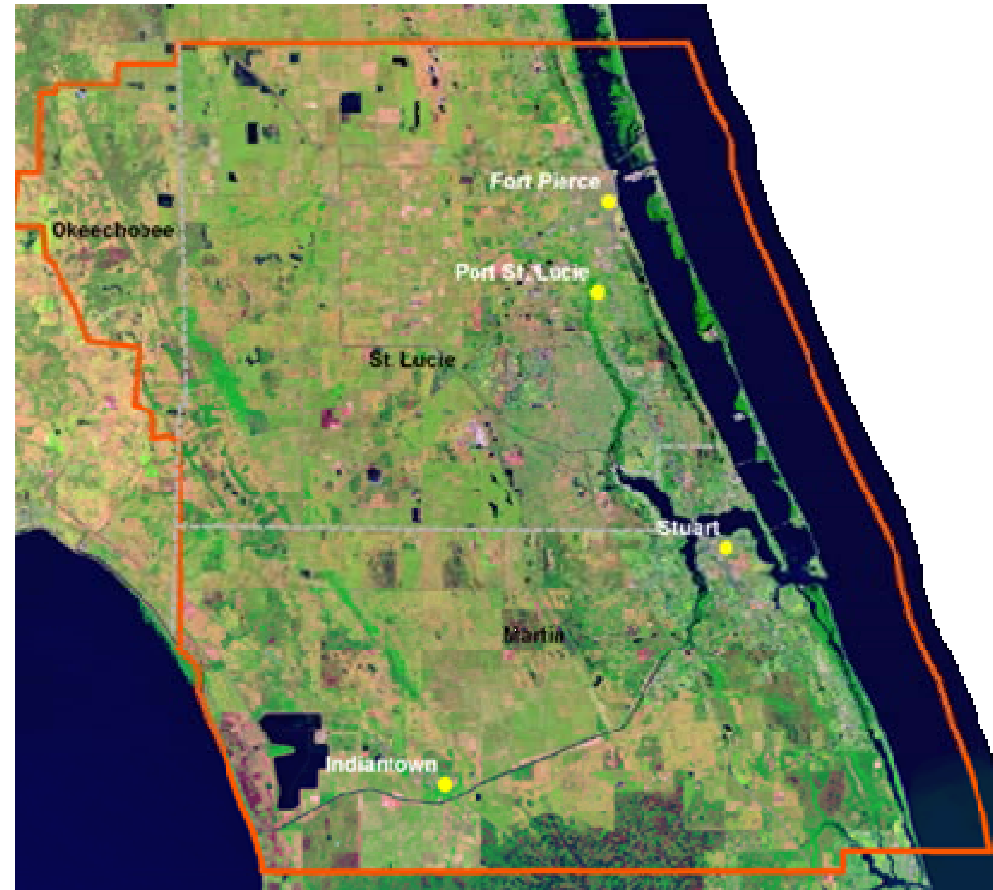
Water Supply Plan Requirements

- **20 year Planning Period**
- **1-in-10 Level of Certainty**
- **Water Resource Development**
 - **Schedules**
- **Water Supply Development**
 - **Options, effectiveness**
- **Minimum Flows and Levels (MFLs)**
 - **Recovery and prevention strategies**



2011 Upper East Coast Update

- Planning Horizon 2010 - 2030
- Population projected to increase by over 100 percent from 382,384 in 2005 to 791,863 people in 2030
- Irrigated agricultural acreage forecast to increase from 95,116 acres to a range of about 97,587 - 115,768 acres.
- Overall water demands estimated to increase from 250 MGD to approximately 320-340 MGD



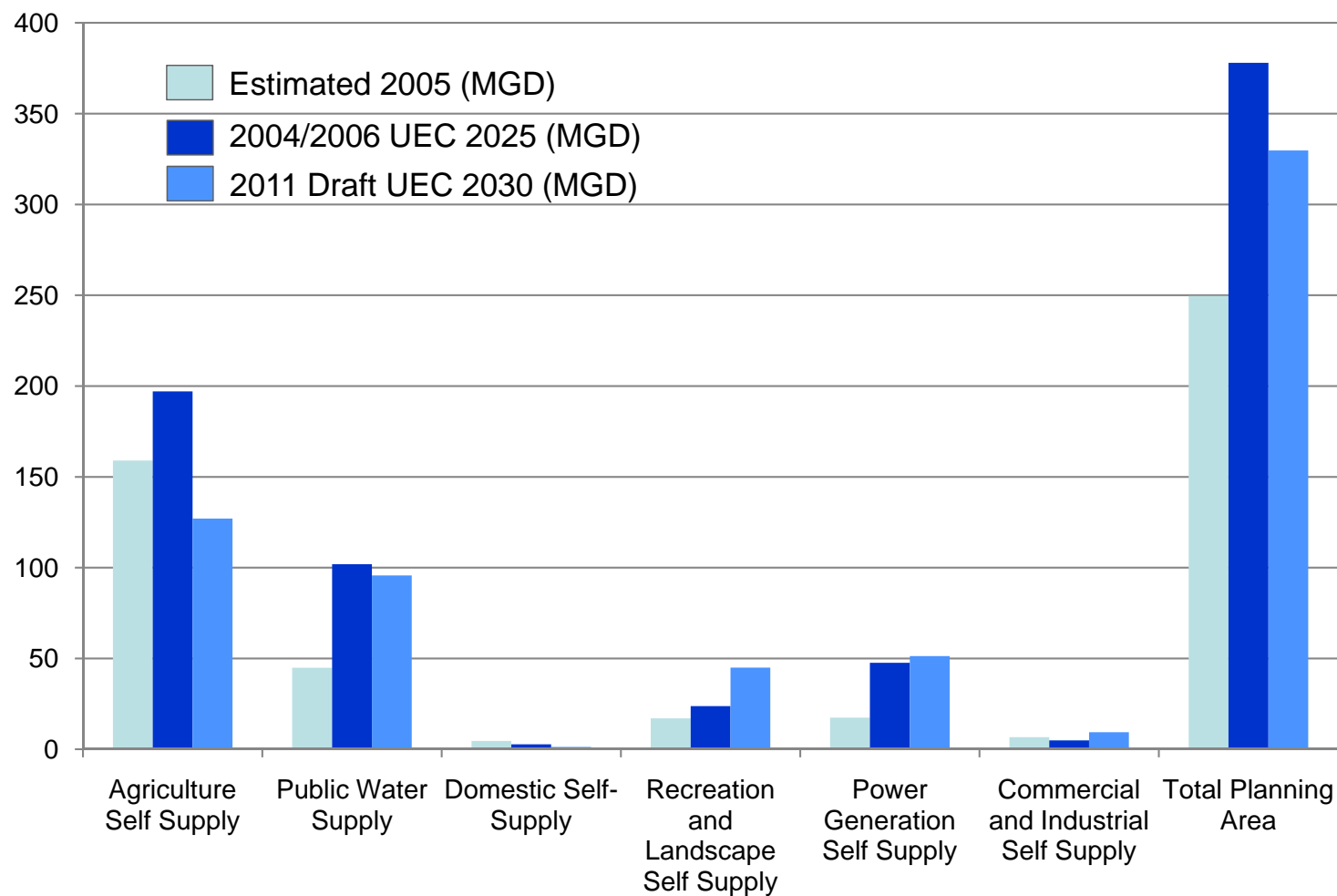
2011 Plan Update Status

- Water Resources Advisory Commission
 - Serves as overall forum
- Four public workshops held to date
- Meetings held with local governments & utilities
- Presentations to local elected bodies
- Draft UEC documents distributed
 - Discussed at WRAC issues workshop on December 15
 - Discussed at WRAC meeting on January 6
 - Receiving written comments through February 10

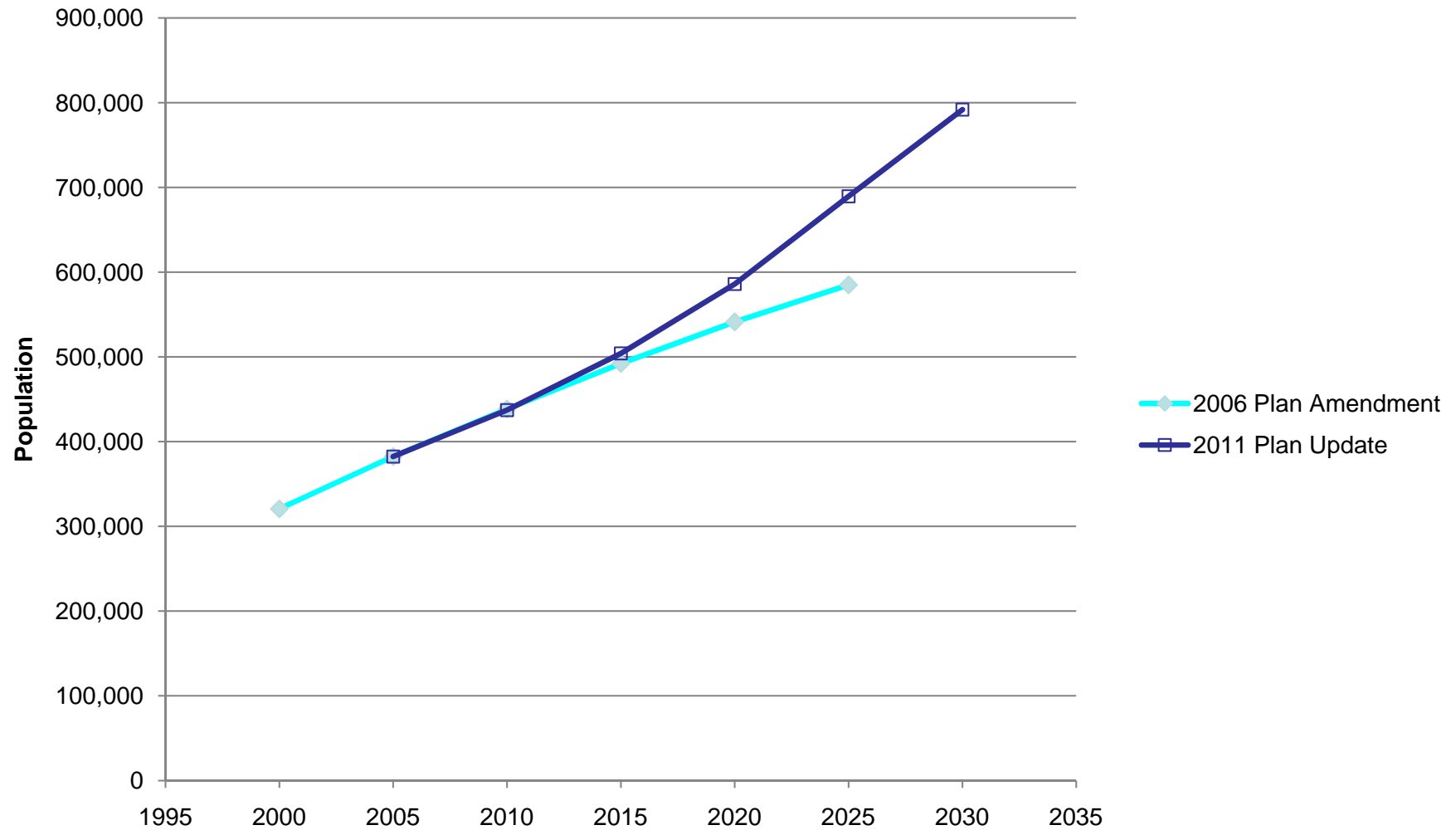
UEC Demands and Projections

Category	Estimated	2004/2006 UEC	2011 Draft UEC
	2005 (MGD)	2025 (MGD)	2030 (MGD)
Agriculture Self-Supply	159	197.1	117-137
Public Water Supply	44.9	101.9	95.7
Domestic Self-Supply	4.6	2.7	1.3
Recreation and Landscape Self-Supply	17.0	23.8	45.0
Power Generation Self-Supply	17.4	47.6	51.3
Commercial and Industrial Self-Supply	6.7	4.9	9.4
Total Planning Area	249.6	378.0	319.7 - 339.7

UEC Demands and Projections



Population



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



2011 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 2030.

Public Water Supply

- **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

- **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

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

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



Questions

SFWMD

