



Upper East Coast Public Water Supply Population Projections and Demands

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sfwmd.gov



Population Projections Upper East Coast Planning Area

Legislative Mandate: F.S. 373.0361(2)(a)1:

- Best available data
- Shall “consider” BEBR medium projections

Objective: Accurately represent population-based water demand in the 2010 UEC Plan Update while recognizing recent local government water supply planning efforts

BEBR = Bureau of Economic & Business Research



Population Projections Upper East Coast Planning Area

Methodology:

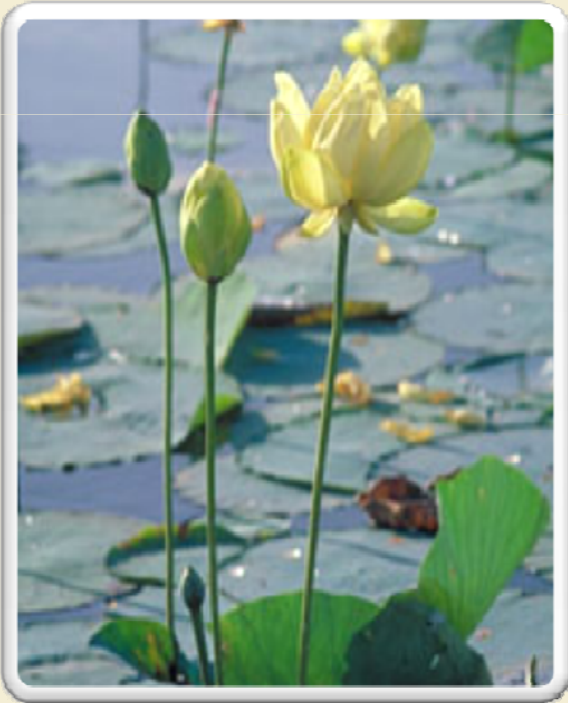
- Establish County-level control populations for 2030
- Distribute control populations to Public Water Supply (PWS) service areas
- Prepare PWS projections in 5-Year increments from 2005 to 2030



Population Projections Upper East Coast Planning Area

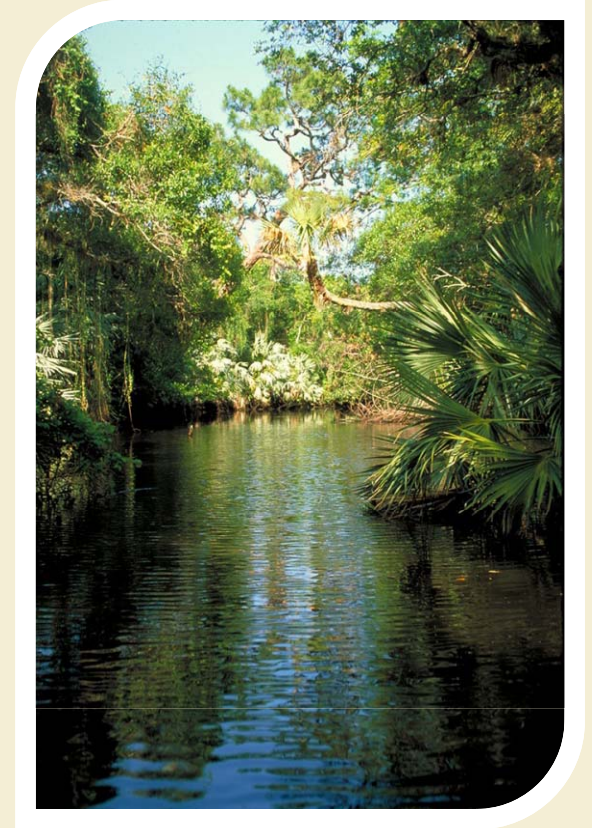
Resources:

- Upper East Coast Water Supply Plan: 2006 Amendment
- 2009 BEBR projections by County
- Adopted local Water Supply Facilities Work Plans (WSFWP)
- Consumptive Use Permits (CUP)
- Traffic Analysis Zone (TAZ) data – Martin & St. Lucie Metropolitan Planning Organizations (MPO)



Population Projections Upper East Coast Planning Area

STEP 1: Establish 2030 County-Level Control Populations



Population Projections Upper East Coast Planning Area

BEBR Medium-Range Projections For 2025 By Year

| County | Date of BEBR Projection (population) | | | | |
|------------|--------------------------------------|---------|---------|---------|---------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Martin | 190,900 | 194,400 | 189,700 | 178,800 | 164,100 |
| Okeechobee | 44,800 | 42,800 | 45,900 | 44,700 | 46,400 |
| St. Lucie | 351,600 | 389,000 | 429,700 | 420,600 | 395,200 |

BEBR Medium-Range Projections For 2030 By Year

| County | Date of BEBR Projection (population) | | | | |
|------------|--------------------------------------|---------|---------|---------|---------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Martin | 202,000 | 205,100 | 199,700 | 187,900 | 170,400 |
| Okeechobee | 48,600 | 45,700 | 47,400 | 46,200 | 48,200 |
| St. Lucie | 377,900 | 419,200 | 466,400 | 460,300 | 434,100 |

Recommended 2030 Countywide Populations

- Martin County = 196,502
- Okeechobee County = 46,400
- St. Lucie County = 539,382



Recommended 2030 Countywide Populations

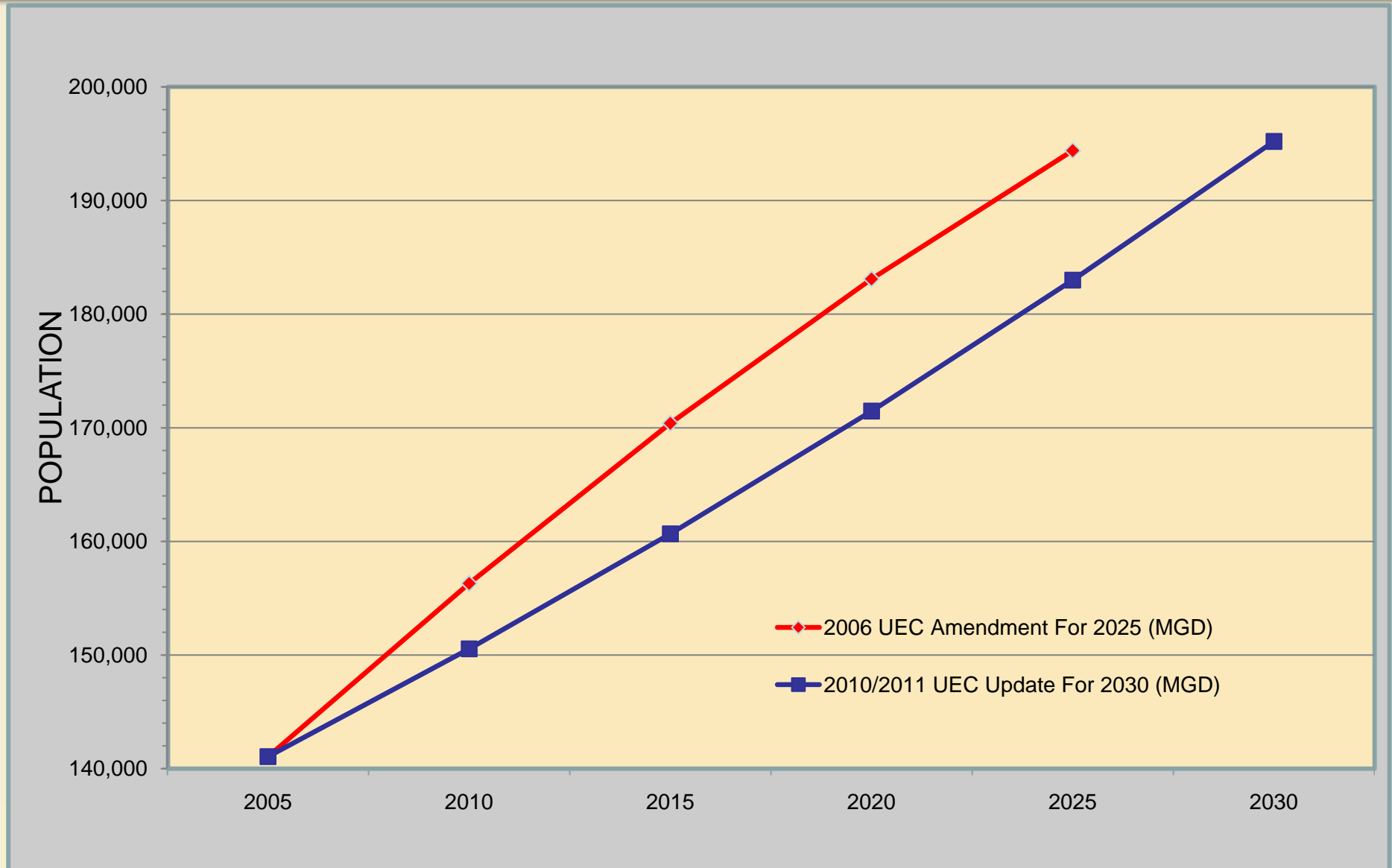
Summary of Recommendations

| SFWMD Recommendation | | 2009 BEBR Projections (2030) | |
|----------------------|-----------------|------------------------------|---------|
| County | 2030 Projection | Medium | High |
| Martin | 196,502 | 170,400 | 205,000 |
| Okeechobee | 48,200 | 48,200 | 55,699 |
| St. Lucie | 539,382 | 434,100 | 567,800 |

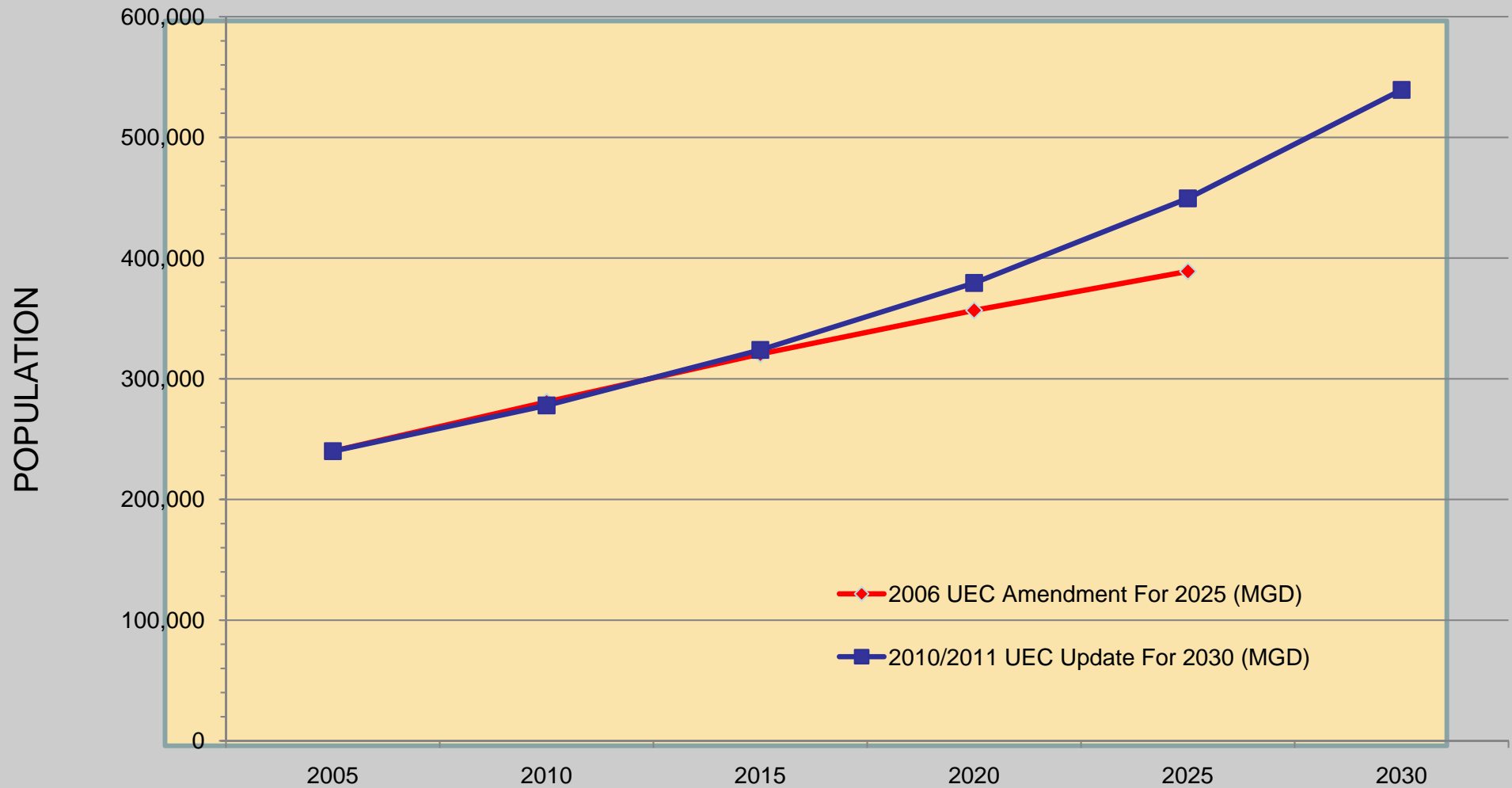
2010-11 Population Recommendations Comparison with 2006 Plan

| UEC County | 2006 UEC Amendment | 2010/2011 UEC Update | Percent Change |
|------------|-----------------------|-------------------------|-------------------|
| | For 2025 | For 2030 | 2025-2030 |
| Martin | 194,000 | 195,204 | 0.62 |
| Okeechobee | 1,527 | 1,662 | 8.84 |
| St. Lucie | 389,000 | 539,382 | 38.66 |
| UEC Region | 584,527 | 736,248 | 25.96 |

PROPOSED MARTIN COUNTY POPULATION PROJECTIONS



PROPOSED ST LUCIE COUNTY PPOPULATION PROJECTIONS



2010-11 Population Recommendations PWS Service Areas

- **Next Step: Distribute 2030 “County-Control” Populations To PWS Service Areas**

2010-11 Population Recommendations

Prepare 5-Year Projections

- **Determine Compound Annual Growth Rate 2005-2030**
 - Slow growth initially
 - More rapid growth at end of projection period
- **Apply Growth Rates to Calculate interim Projections**
 - 2010, 2015, 2020, and 2025



Water Demand Projections Methodology

- **Per Capita Projection Method (PCUR)**

- **Raw Water Demand**

- **Finished Water Demand**

- **Projected Population x PCUR
(per capita use rate)**

- **Assumption: Historical PCURs
remain constant over time**

- **Base year – 2005**

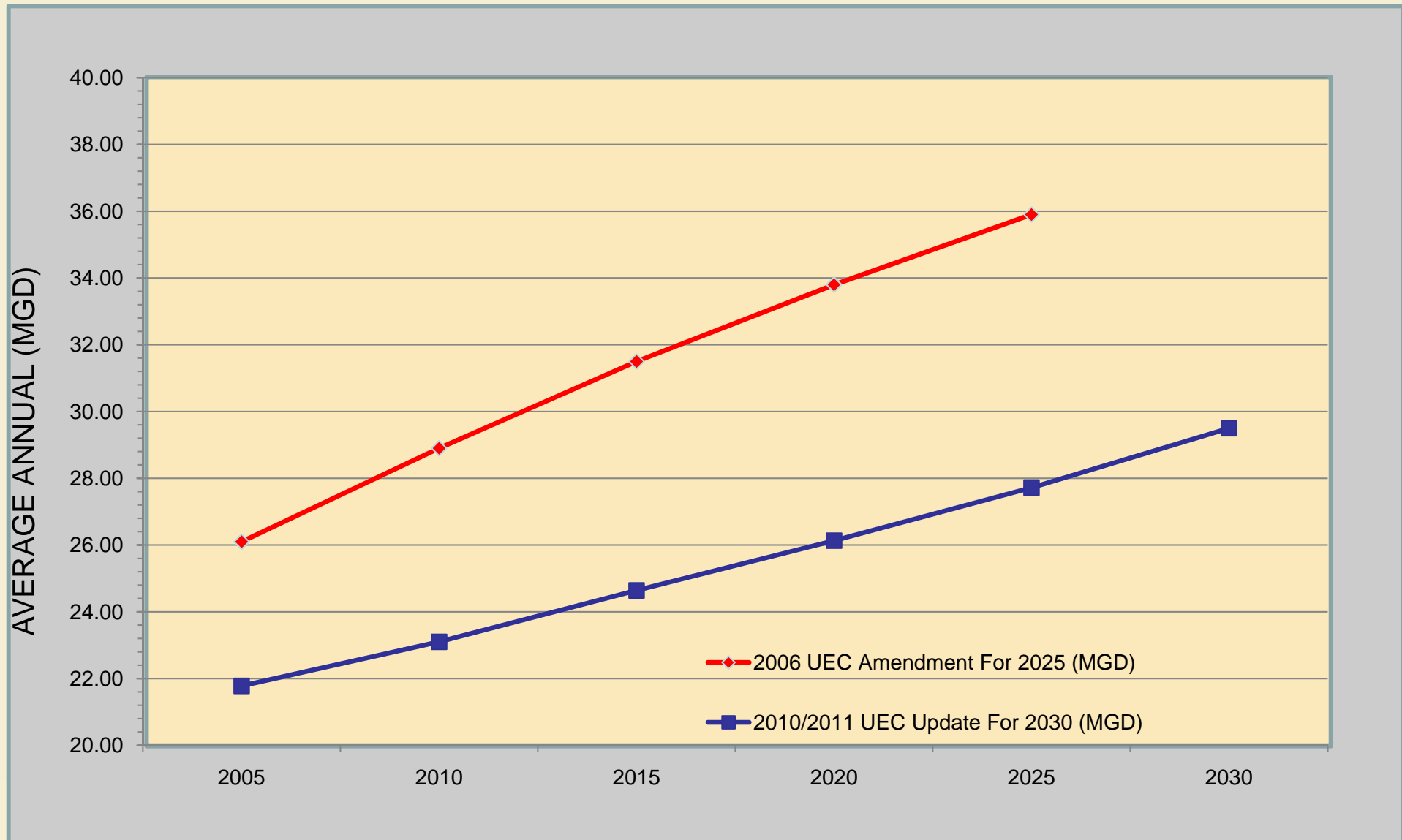
- **Data Sources: Raw water –
USGS; and Finished water – FDEP**



2010-11 Water Demand Recommendations Comparison with 2006 Plan (MGD)

| UEC County | 2006 UEC Amendment | 2010/2011 UEC Update | Percent Change |
|------------|-----------------------|-------------------------|-------------------|
| | For 2025 | For 2030 | 2025-2030 |
| Martin | 35.90 | 29.50 | -17.83 |
| Okeechobee | 0.20 | 0.17 | -0.15 |
| St. Lucie | 50.00 | 57.18 | 14.36 |
| UEC Region | 86.10 | 86.85 | -0.87 |

PROPOSED MARTIN COUNTY FINISHED WATER DEMAND



PROPOSED ST LUCIE FINISHED WATER DEMAND

