

Water Resource Challenges & Water Conservation in Gainesville Area

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by

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Strategic Planning

Gainesville Regional Utilities

Topics

- **Statewide Water Conservation Initiatives**
 - Water Congress
 - SJRWMD & SRWMD Proposed Rules
 - Future SJRWMD landscaping rules
- **Water Supply – Alachua County**
 - SJRWMD Water Supply Assessment
 - GRU Consumptive Use Permit
- **GRU Current RCW & Conservation Programs**
- **Future Initiatives**

2008 Water Congress

- Century Commission
- Goal: Develop a comprehensive set of sustainable water use and supply action steps.
- *A long-term water conservation, use and supply plan, for environmental, agricultural and public consumption purposes is essential for a sustainable quality of life in Florida*
- 120 Delegates
 - Agriculture
 - Environmental Groups
 - Municipalities
 - Academics
- Recommendations to be forwarded to governor & legislature

FDEP

Water Mngmt Districts

Local Governments

Water Congress

Final 4 Recommendations

- Reinstate state funding for water supply development
- Support regional water supply partnerships
- Consider conservation as an alternative water supply
- Set statewide per capita goal

Other Takeaways

- Maintenance of Water for natural systems essential
- Increasing emphasis on reducing landscape irrigation
- Increased pressure on local governments & utilities to implement/enforce conservation

SJRWMD Proposed Irrigation Rule

- Odd/Even Watering Restrictions
 - 2 day/wk EDT (Odd – Wed & Sat; Even - Th& Sun)
 - 1 day/wk EST (Odd – Sat; Even – Sun)
- Applies to Reclaimed Water
 - Utility concerns
- Enforcement by local governments
- No new irrigation wells if RCW available
- Expected to be in place by spring 2009

SJRWMD Landscaping Initiative

- SJRWMD staff committee developing recommendations for landscaping ordinances to reduce water use
- May ultimately require local governments/utilities to enact & enforce via CUP process

2003 SJRWMD Priority Water Resource Caution Area

Gainesville not in the Caution Area

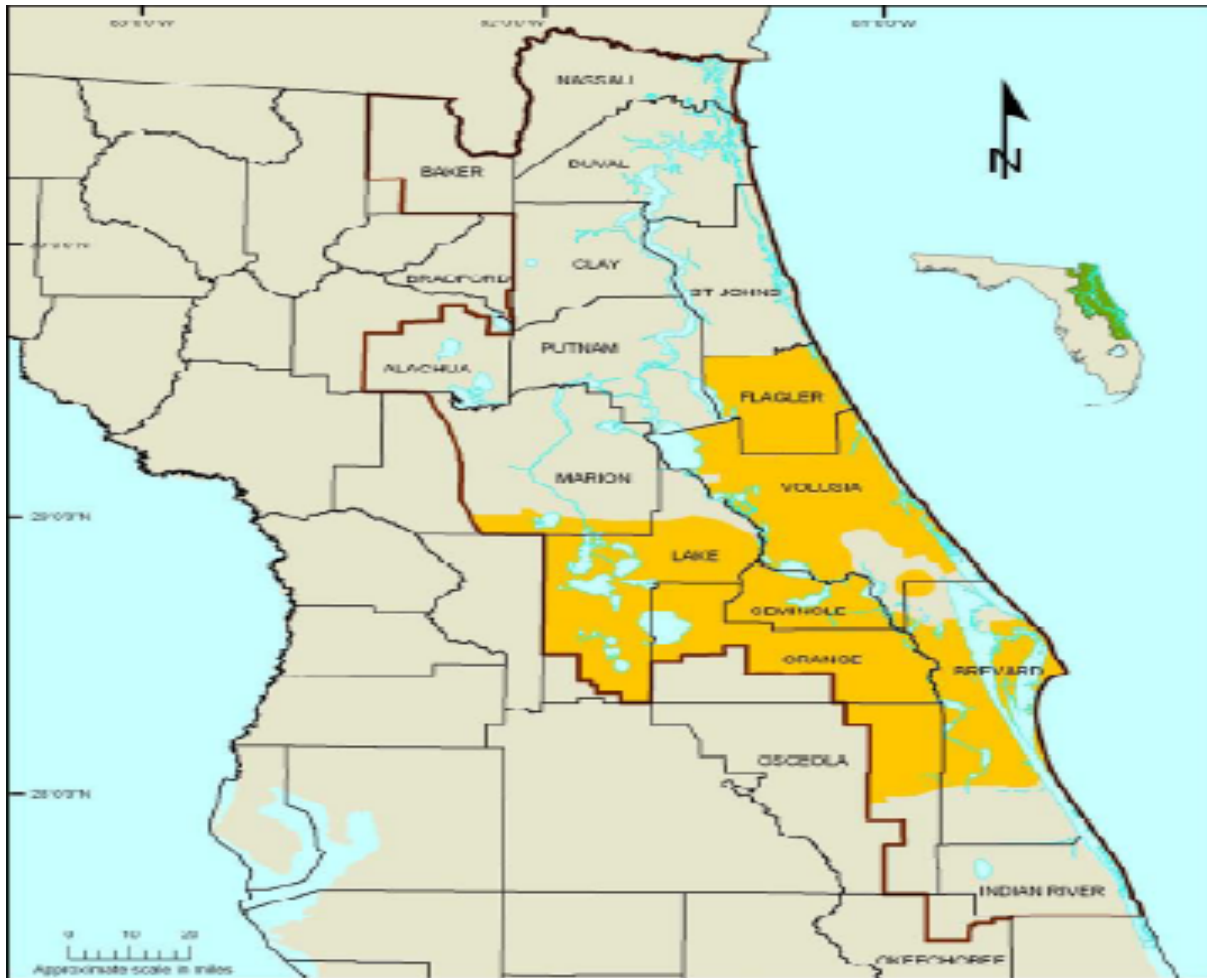
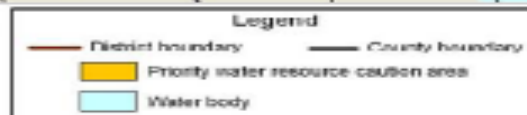
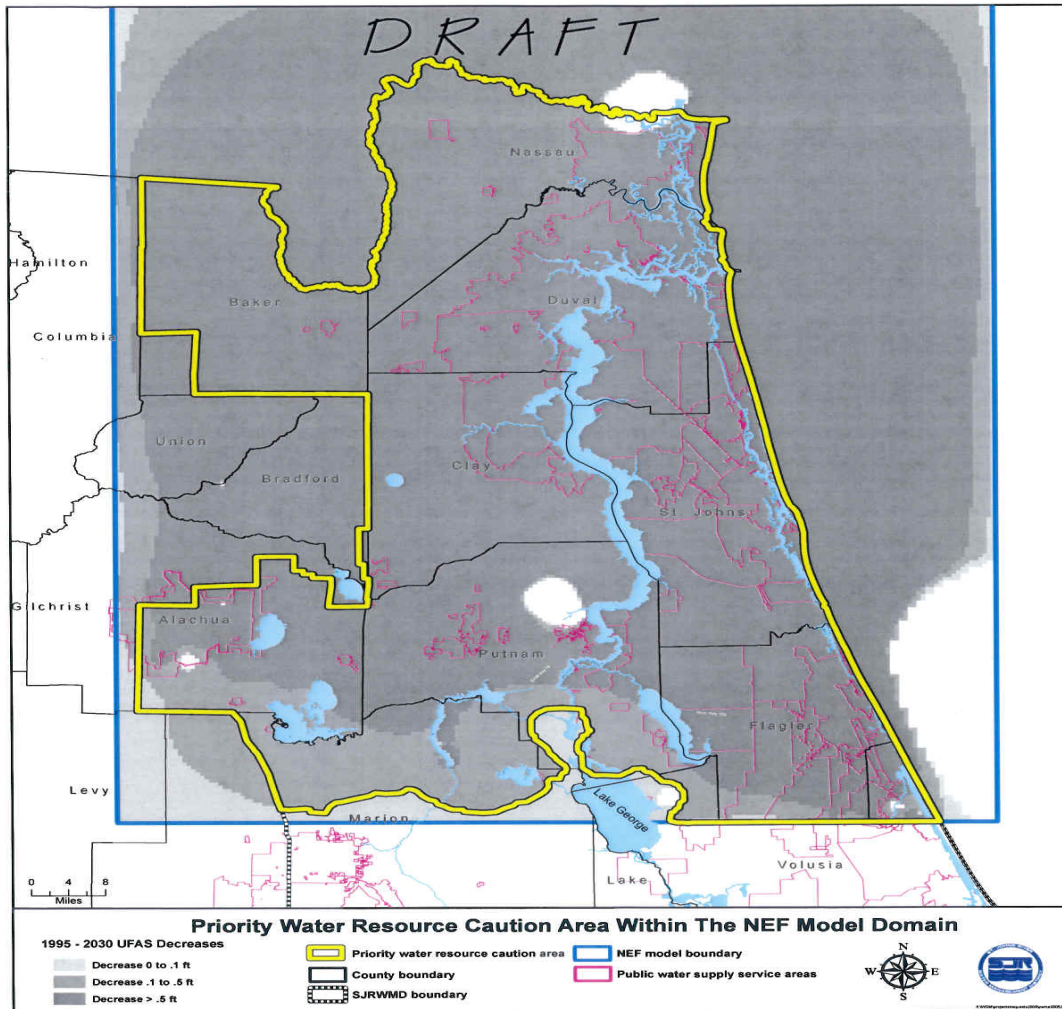


Figure ES3. Priority water resource caution areas in the St. Johns River Water Management District, 2003



Proposed 2008 Water Resource Caution Area

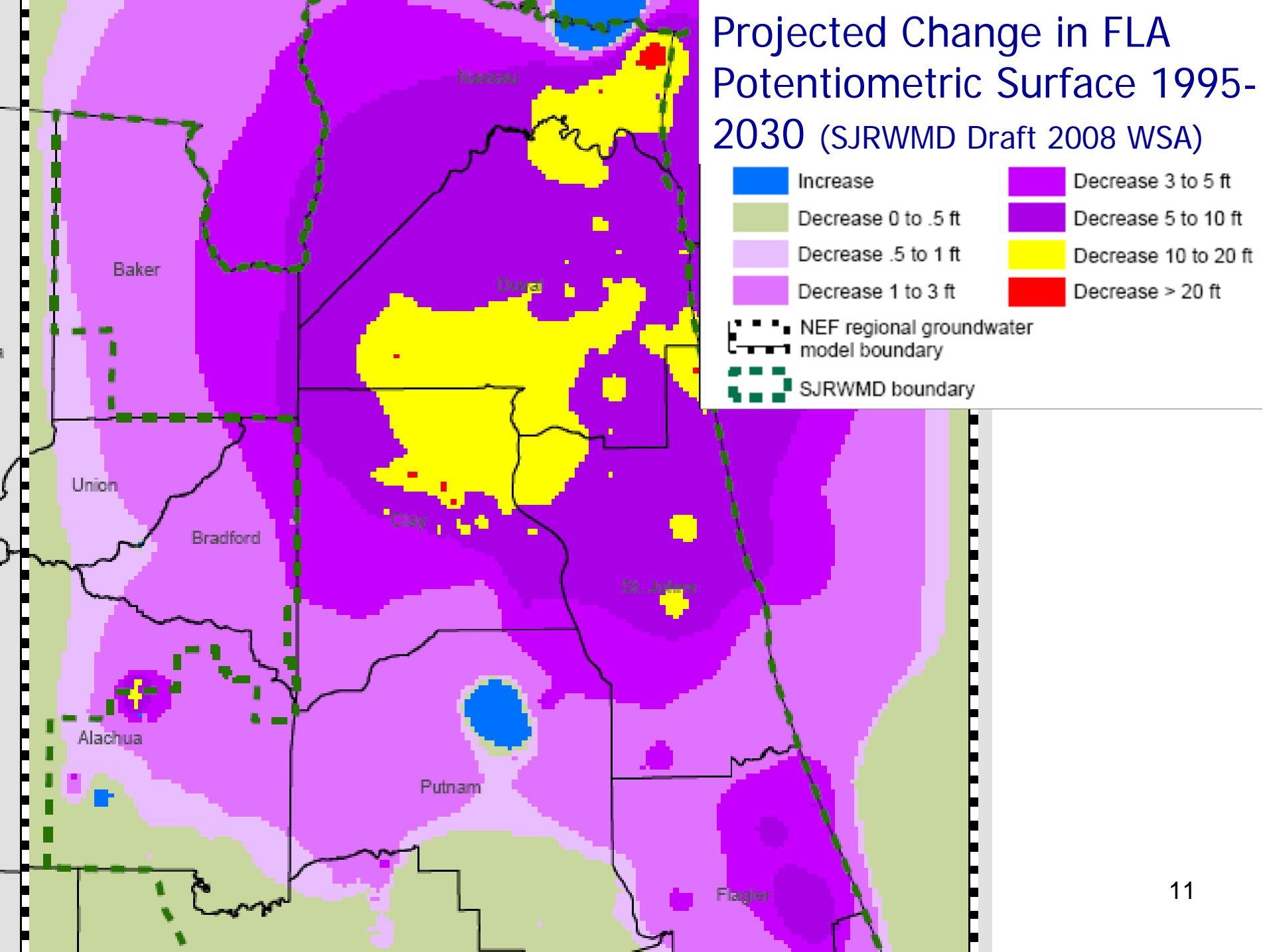


Gainesville and entire NE Florida are in Caution Area

Groundwater Modeling

- Recent models address combined impacts from multiple users & cover larger area
- SJRWMD & SRWMD reviewing/tuning recent models (NF & NEF Models)
- GRU yet to review
- Initial Results
 - Potential Future impacts to Keystone Heights lakes
 - GRU minor contributor
 - Duval & Clay County withdrawals predominate
 - Potential Future impacts to Santa Fe River flows
 - Likely to be future water supply constraints
- Likely future water supply constraints

Projected Change in FLA Potentiometric Surface 1995-2030 (SJRWMD Draft 2008 WSA)



SJRWMD Water Supply Planning

- GRU pursuing 5-year CUP
- SJRWMD Water Supply Plan
 - SJRWMD & SRWMD plan to initiate public workshops in June 2009
 - North Florida Coordination group
 - Regional Sub-groups as needed
 - Complete plan in 2010

Proposed Approach for meeting future water supply

- Develop Integrated Plan for meeting future water supply
 - Goal based Conservation & Reuse
 - Develop most effective strategy
 - Review current programs & effectiveness
 - Use ConserveFloridaWater & other tools to optimize portfolio
 - County, other City depts & others will play important roles
 - Interaction with stakeholders

GRU Current Water Conservation Programs

- Efficient System Operations
 - Meter Change Out
 - Stopped Meter
 - Water Distribution System Leak Detection Program
 - Pressure Monitoring/Control

Familiar Approach to Water Conservation - DSM

- The “old” four legged stool
 - Regulation
 - Education
 - Rates
 - Incentives

Education

- Advertising/promotion
- Energy/Water Survey
- Water-Star Education
- High User Notification

GRU 2009 Water Rates

- Residential
 - \$7.00 customer charge
 - \$1.59/kgal 0 to 9 kgal/mo
 - \$3.11/kgal 10 to 24 kgal/mo
 - \$5.50/kgal >25 kgal/mo
- Commercial
 - \$7.00/mo customer charge
 - \$3.11/kgal

Irrigation System Survey Program

- Initiated April 2008
- 80 Customers so far
- \$50 rebate for irrigation survey/maintenance
- \$25 rebate for installing/replacing new rain sensors
- Partnering Contractors qualify/register w/ GRU & receive training

GRU Water Reuse

- Aquifer Recharge
 - Treat to drinking water standards
 - Recharge aquifer
- Paynes Prairie Sheetflow Restoration
- Irrigation Reuse
- Industrial Reuse

Water Reuse Initiatives

- More aggressive expansion of RCW distribution
- Proposed Changes in RCW extension policy & cost recovery
- Work with Alachua County & City Planning on LDR requirements to for RCW dist systems in new developments
 - Required to SJRWMD

Future Discussion Items

- Invite Dr. Heaney to talk about ConserveFloridaWater
- **RUC Input**