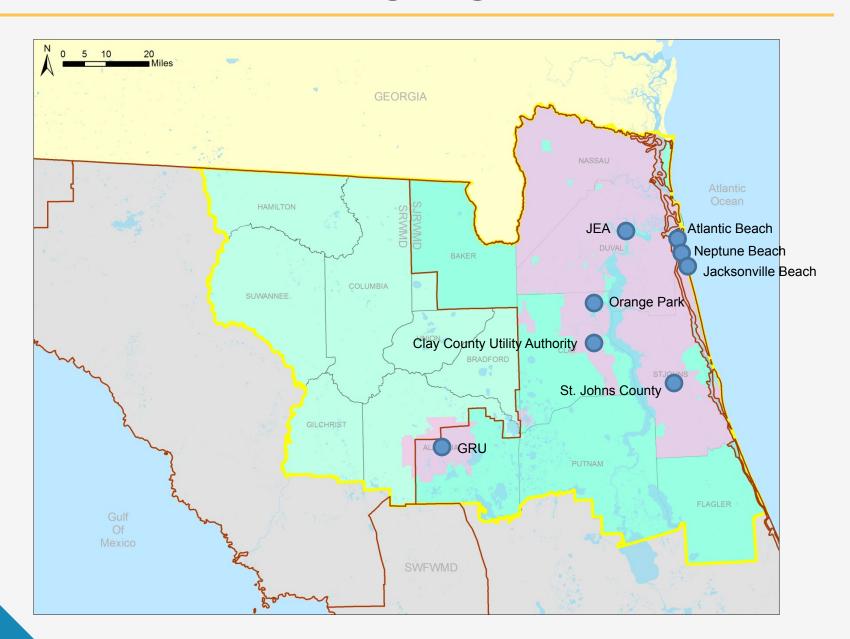
### **Collaboration on Complex Regional Issues**

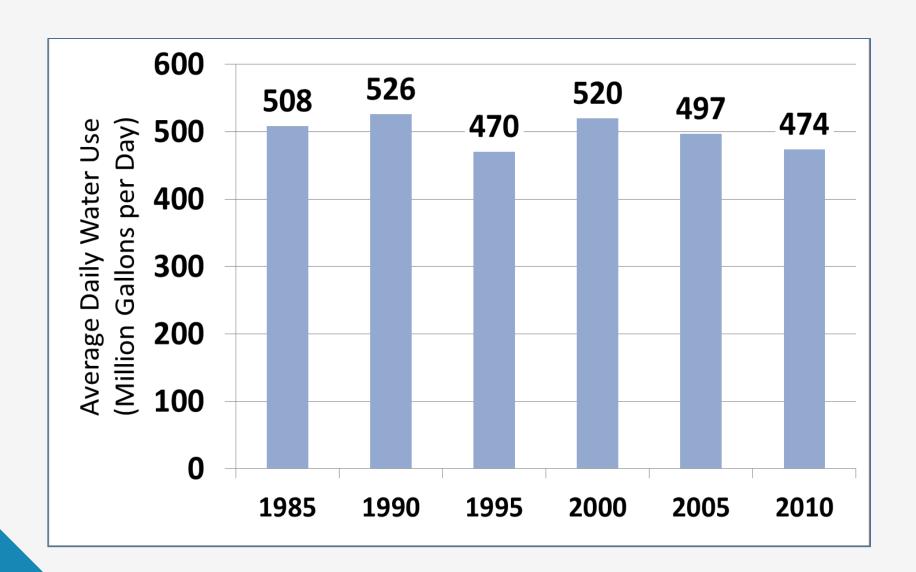
North Florida Utilities Coordinating Group (NFUCG)

Paul Steinbrecher, PE 29<sup>th</sup> Chamber Environmental Summer School North Florida Water Challenges

# **North Florida Planning Region**



#### North Florida Planning Region Water Use

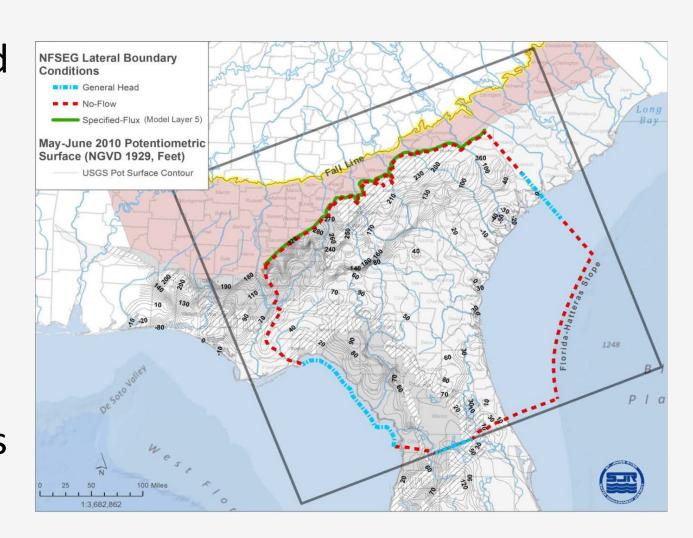


#### **Regional Issues for Collaboration**

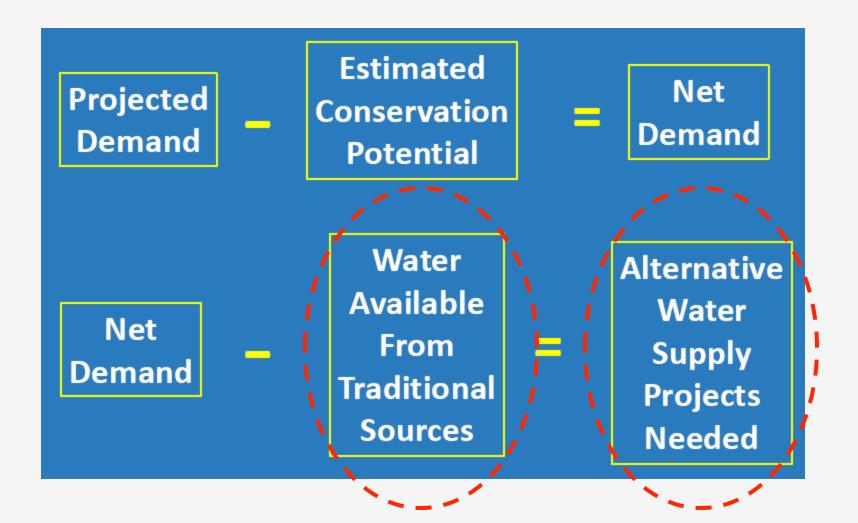
- Groundwater model development
- Regional water supply planning
- MFL development and re-evaluation
- Prevention and recovery strategies

### **Complex & Massive Groundwater Model**

- Largest and most complex model by SJRWMD
- Basis of all regional evaluations



## Water Supply Planning for Future Needs



## MFLs Being Developed/Re-Evaluated

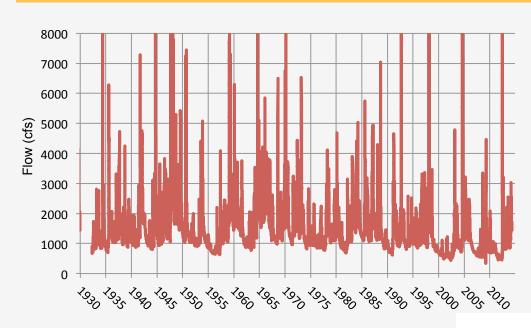


#### MFLs Protect from Manmade Impacts

#### Man-Made Impacts Land Uses Consumptive Uses cksonville cksonville Bea ugustine ort Matanz Palm Coast Deland LEGEND 2010 Generalized Land Use ■ District Boundary Agriculture - Major Roads Santa Fe River Forest & Rangeland Santa Fe River Watershoo ■ Urban & Transportation Water County Boundaries

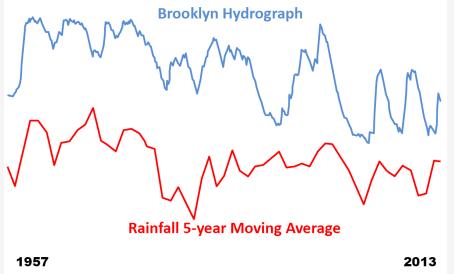
Louise

### MFLs for Highly Variable Hydrology

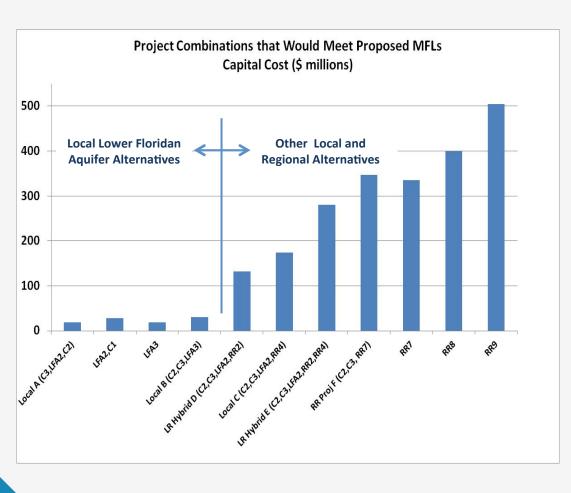


Lower Santa Fe
River (springs and
surface water) in
the SRWMD

 Lake Brooklyn (sandhill lake) in the SJRWMD



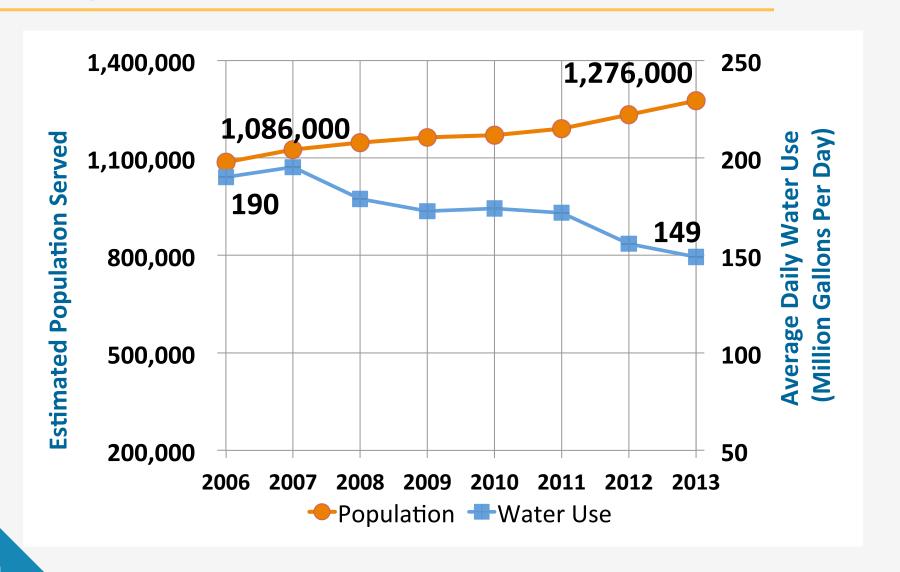
## **Equitable Prevention and Recovery Strategies**



- Seeking economical solutions
- All users contribute to impacts - Costs for solutions must be shared
- Apportionment results in equitable contributions

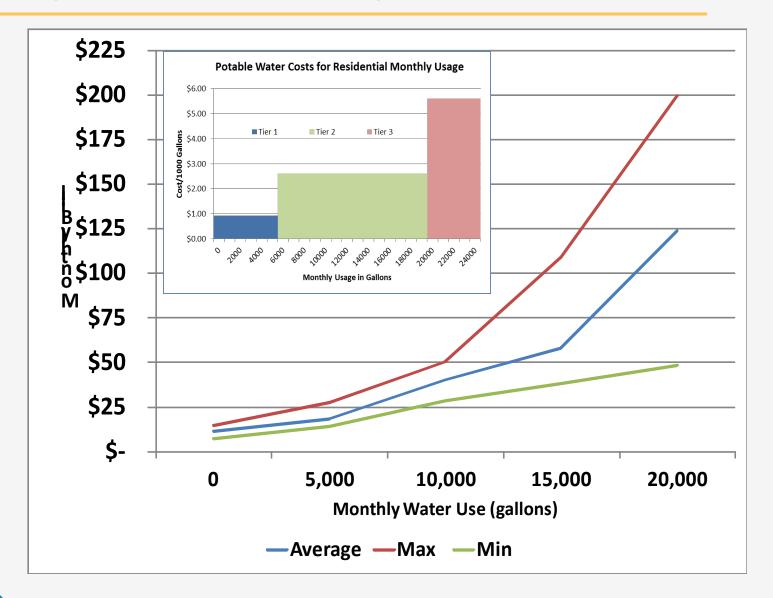
#### **NFUCG Committed to Efficient Use**

#### **Through Conservation/Rates and Reuse**



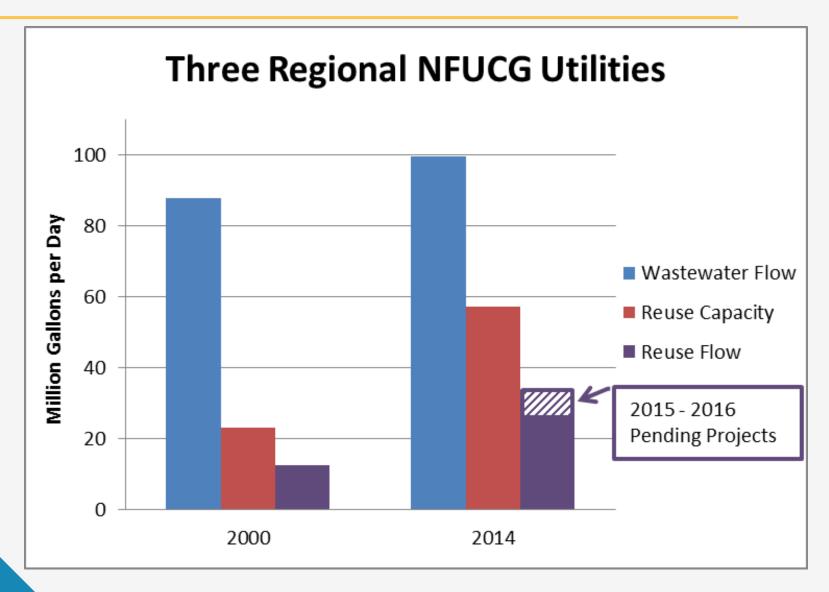
#### Water Rates Reflect Value of Resource

#### **Reaching Point of Diminishing Returns**



### Reuse Capacity Has Expanded Significantly

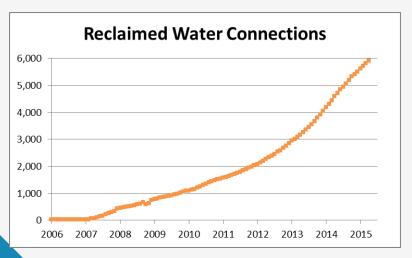
**Opportunities Vary by Location** 

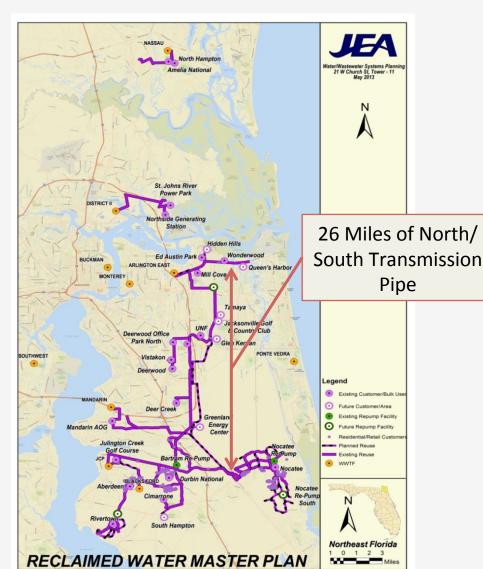


#### **NFUCG Committed to Reuse**

#### **JEA Example**

- ~\$100M investment to date
- >6,000 customers
- FY14 Avg Daily Flow 12.5 MGD
- Over 190 miles of pipe
- 2015 York Award Winner





# **North Florida Utility Group Goals**

- Continued regional cooperation to leverage financial and technical resources
- Application of best science to complex and costly decisions
- Support for practical solutions for environmental sustainability
- Continued leadership in conservation and reuse