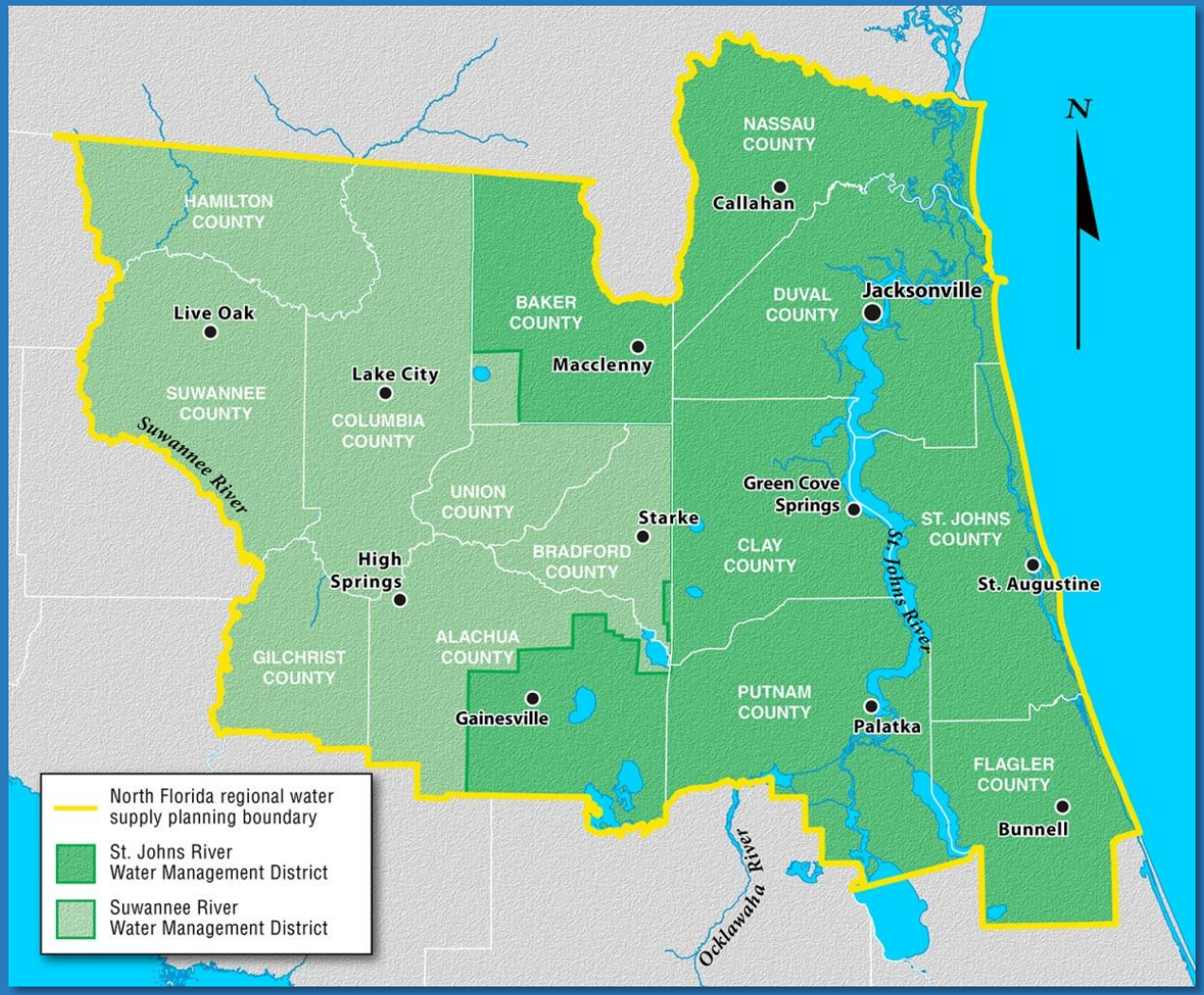
Update on the Draft North Florida Regional Water Supply Plan

September 9, 2016
2016 EPB/UNF Environmental Symposium

John Fitzgerald
Regional Water Supply Planning Coordinator
North Florida Regional Water Supply Partnership

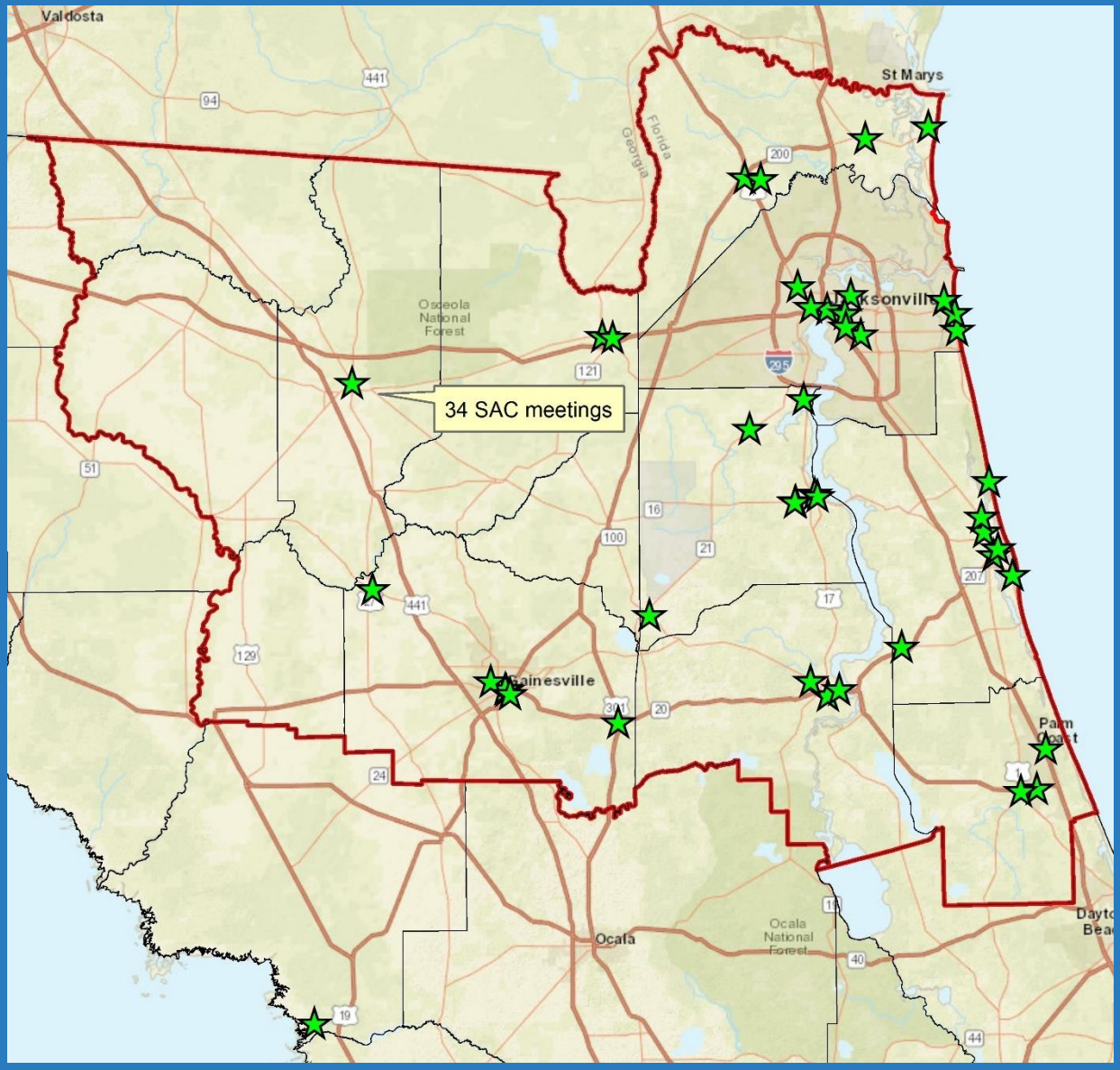
North Florida Regional Water Supply Partnership



34 Stakeholder Advisory Committee Meetings

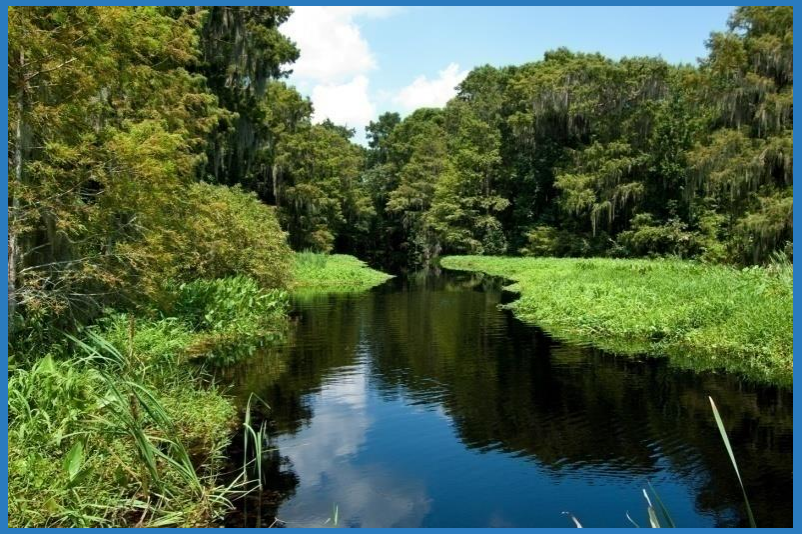
Stakeholder Group	SJRWMD Member	SRWMD Member
Public Supply	Rick Hutton, P.E. *Gainesville Regional Utilities*	Stephen Roberts *Lake City Utilities*
Agriculture	Kerry Kates *Florida Fruit and Vegetable Association*	Thomas Harper *Harper Farms*
Commercial/Power Generation	Nancy Kilgo Veasey *JEA*	James Cornett *Cornett's Spirit of the Suwannee, Inc.*
Environmental	Patrick T. Welsh, Ph.D. *UNF and Save Our Lakes*	Jacqui Sulek *Audubon Florida*
Industrial/Mining	J. Michael O'Berry *Vulcan Materials Company*	Terry L. Baker, P.E. *PotashCorp – Phosphate Division*
Local Government	Lee Pinkoson *Commissioner, Alachua County*	Gene Higginbotham *Commissioner, Dixie County*

Outreach and Collaboration

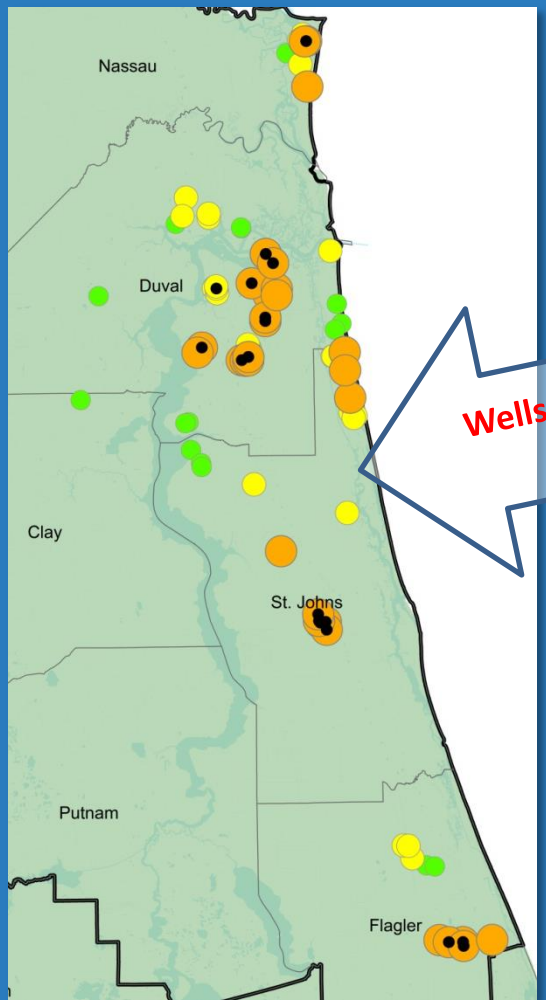


Water Resource Analysis

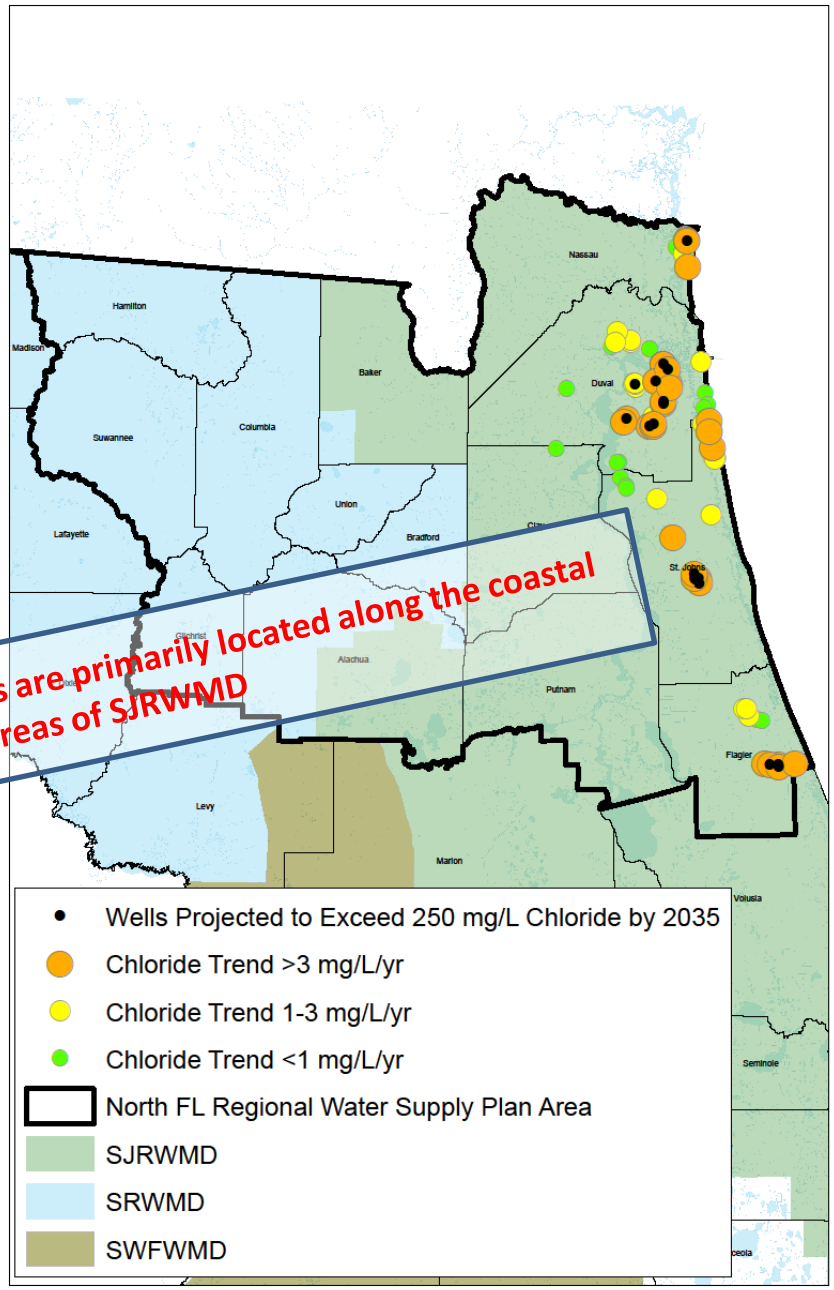
- Assessment of the amount of fresh groundwater available for water supply
- Determine impacts to water resources (i.e. constraints)
  - groundwater quality
  - wetlands
  - MFLs
  - spring flows



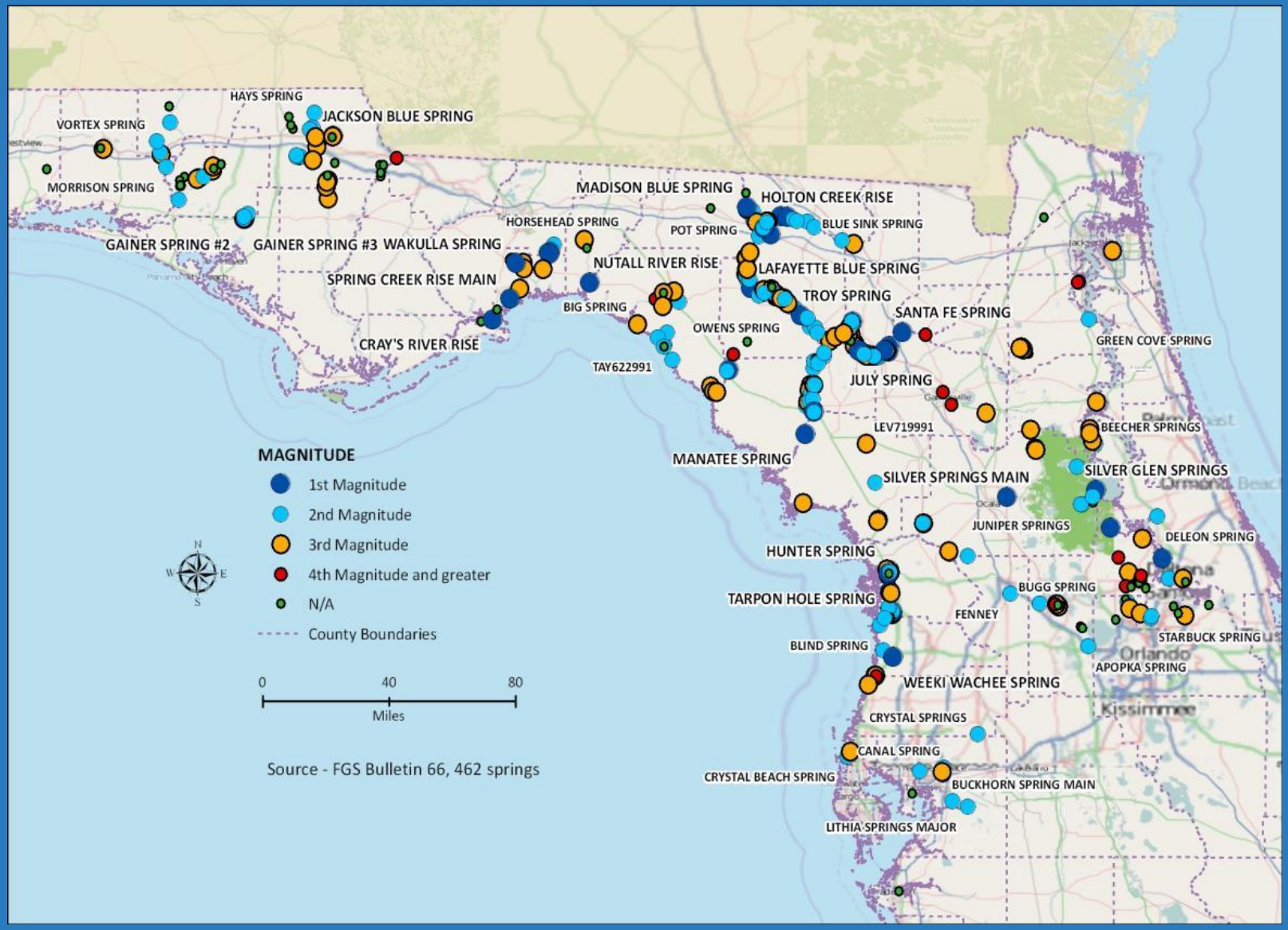
Some Wells Indicate Areas of Concern Regarding Groundwater Quality



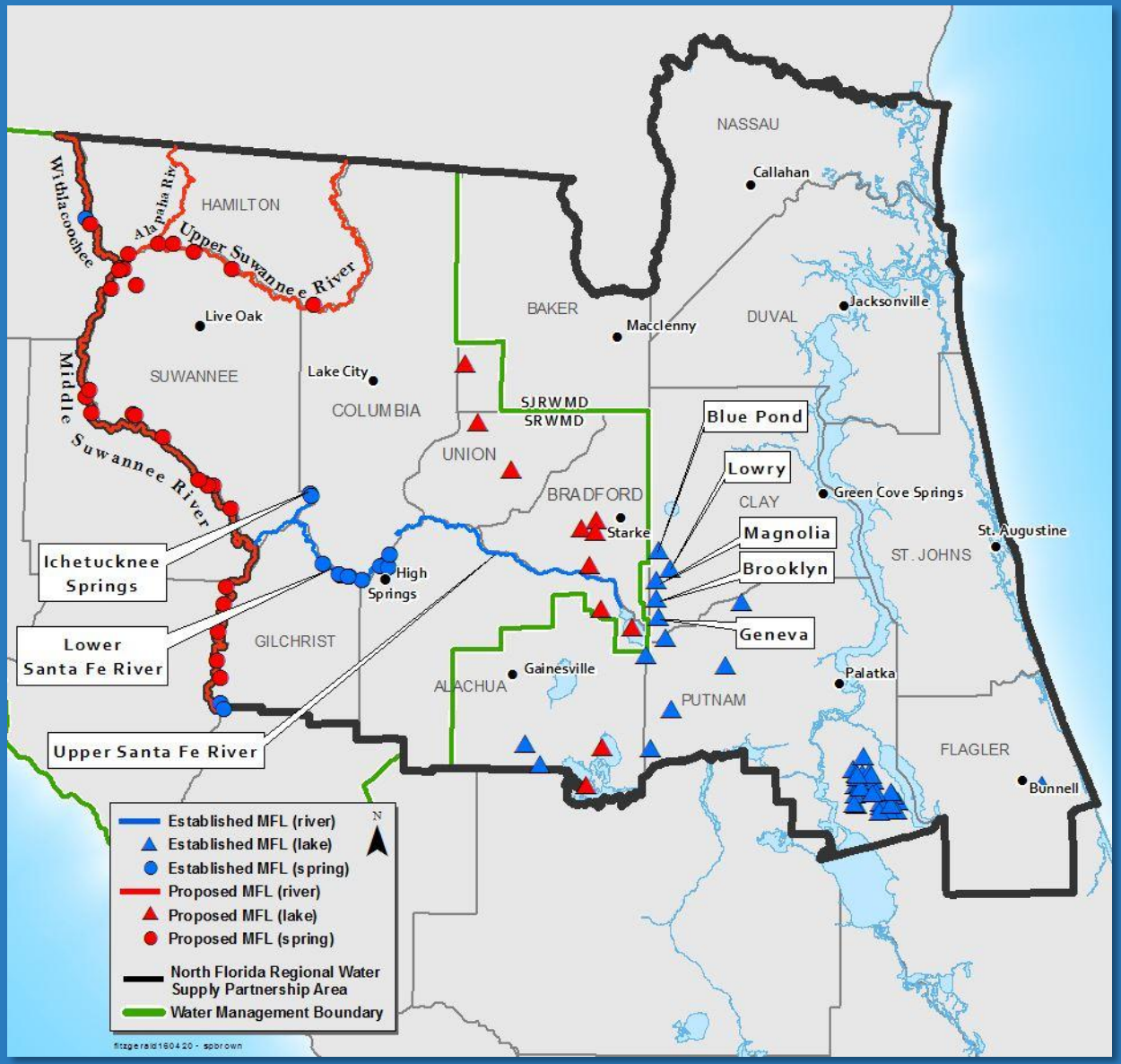
Wells experiencing trends are primarily located along the coastal areas of SJRWMD



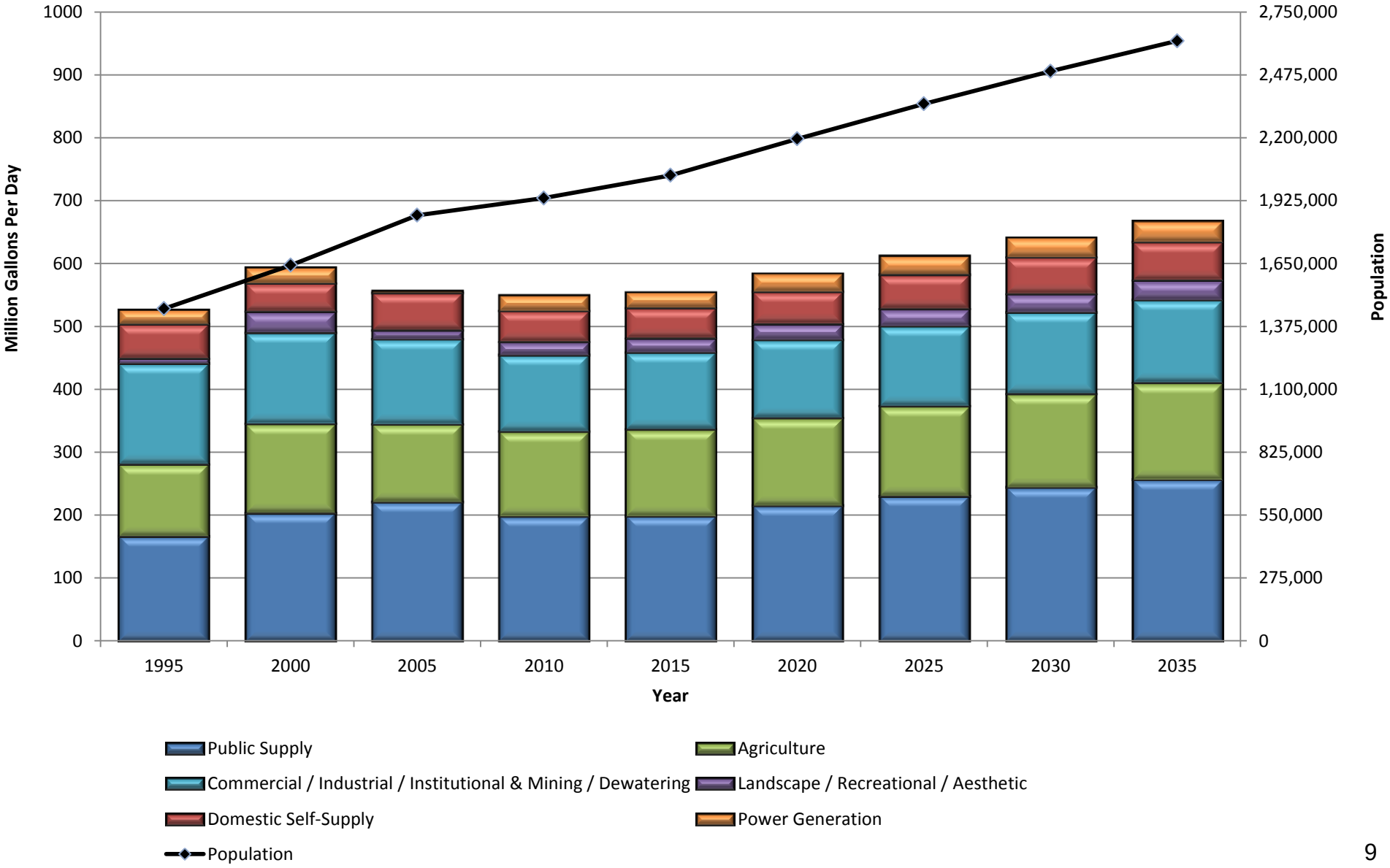
North Florida — Springs Heartland



MFLs in and near the NFRWSP



Historic Water Use and Population -vs- Projected Water Demand and Population in NFRWSP



Water Use and Draft Projections for the NFRWSP Area

Category	2010	2035	Change	% Change
Public Supply	198	256	58	29
Domestic Self-Supply and Small Utilities	49	61	12	24
Agriculture	135	153	18	13
Commercial / Industrial / Institutional and Mining / Dewatering	121	132	11	9
Landscape / Recreation / Aesthetic	22	31	9	41
Power Generation	25	34	9	36
Total	550	667	117	21

Numbers may differ slightly due to rounding
Values shown in million gallons per day. Values do not include NWFWMD, SWFWMD or Georgia

The Region's Challenge

Estimate 667 mgd of water need at 2035

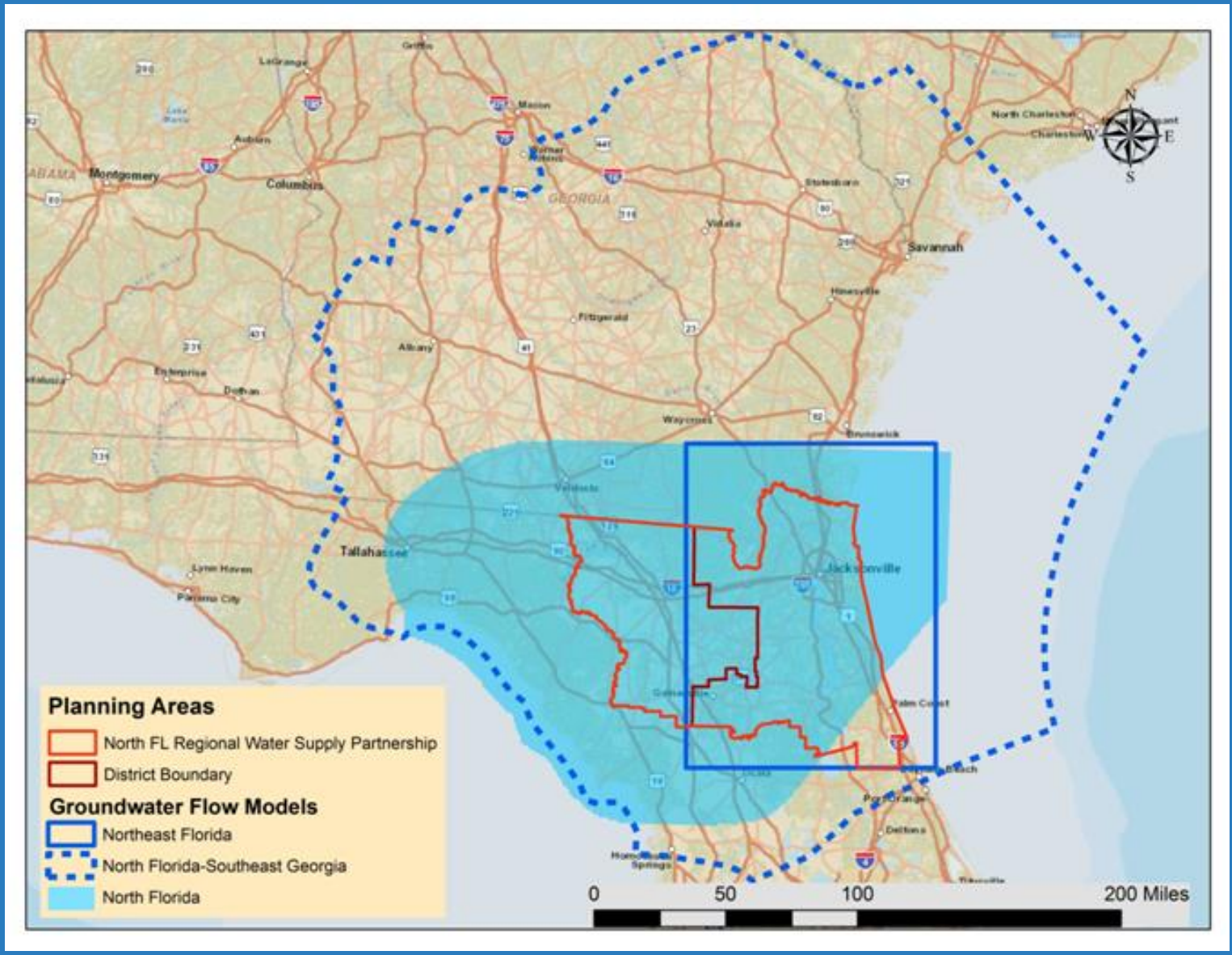
Range of recovery for the Lower Santa Fe and Ichetucknee MFLs

117 mgd potential needed by 2035

550 mgd in 2010

Currently modeling efforts are underway to estimate the available groundwater to meet future demands.

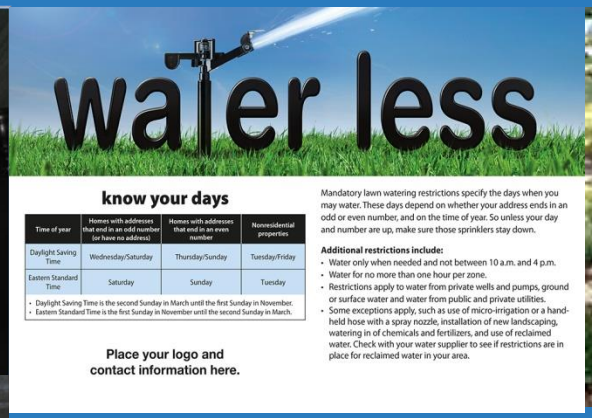
NFSEG Model Overview

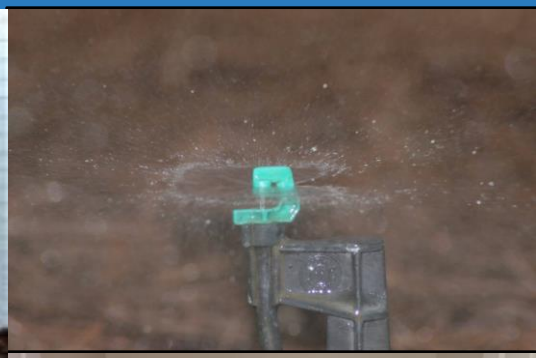


Opportunities and Solutions

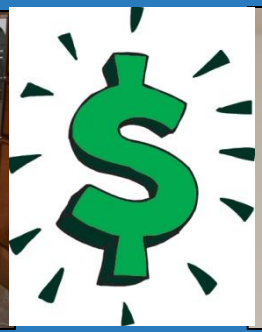
- Water conservation
- Recharge
- Alternative water supply
  - Surface water
  - Stormwater harvesting
  - Reuse
- Collaboration

Water Conservation

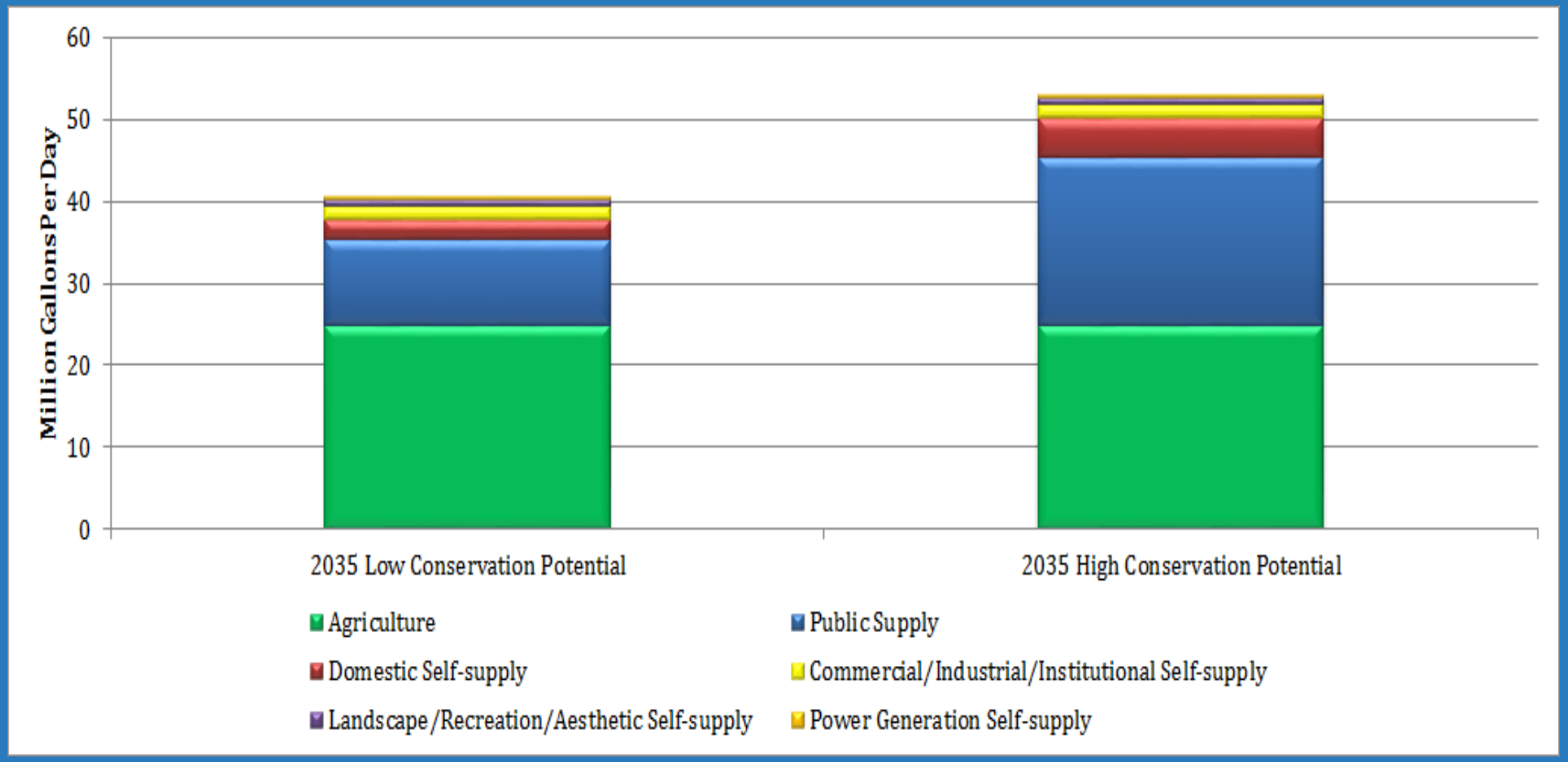




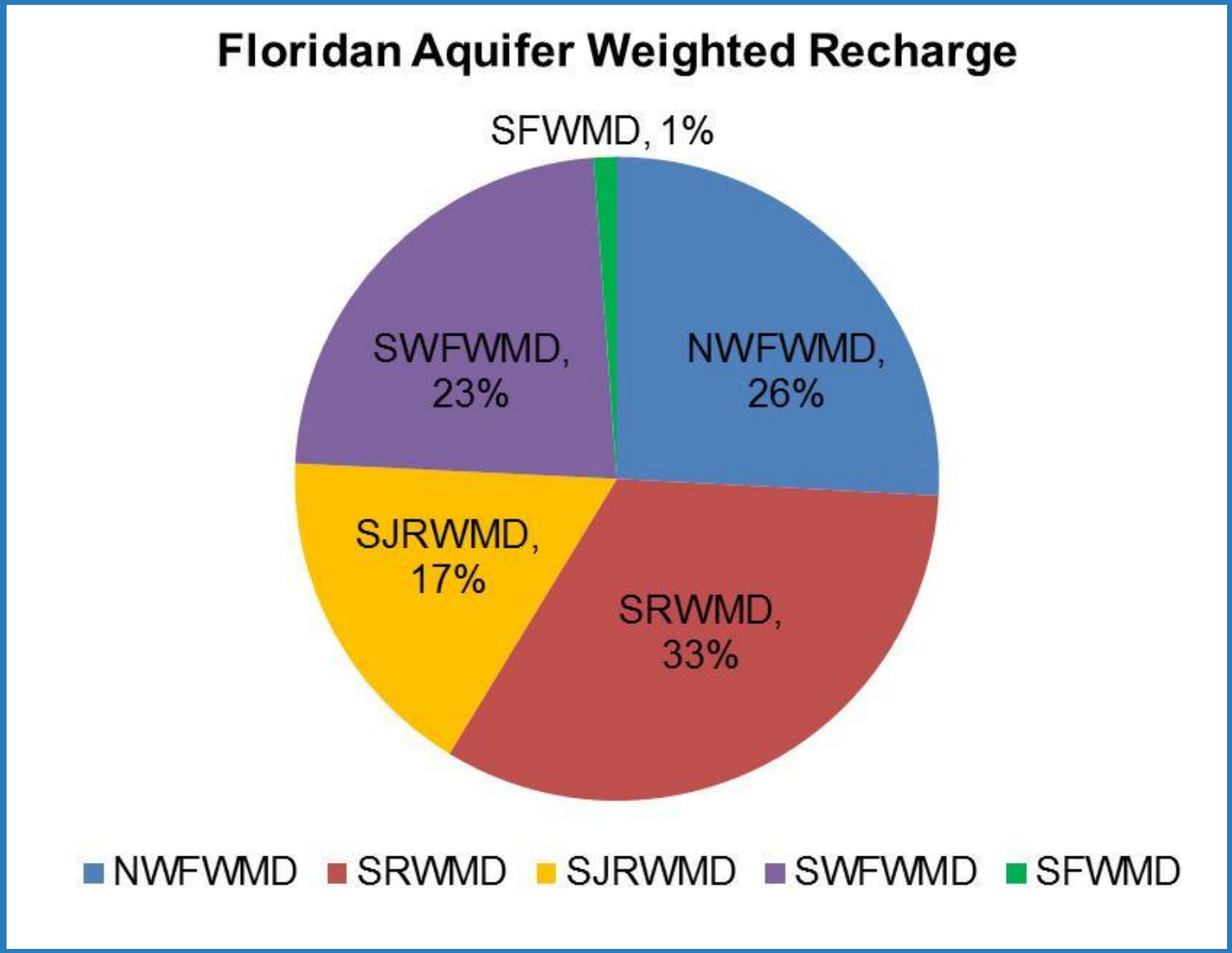
- Indoors
- Outdoors
- Rates
- Education



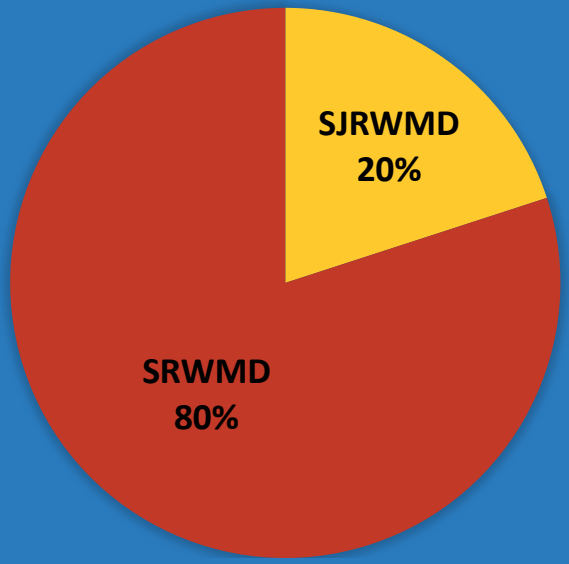
2035 Low and High Conservation Potential



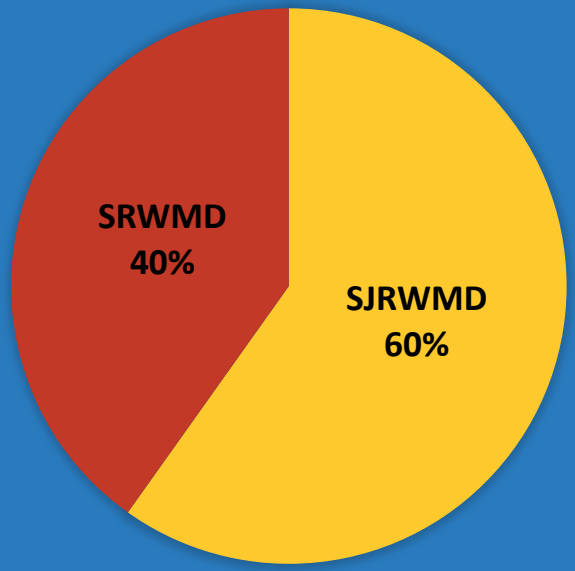
Recharge to Floridan Aquifer



Recharge in partnership area



Acreage in partnership area



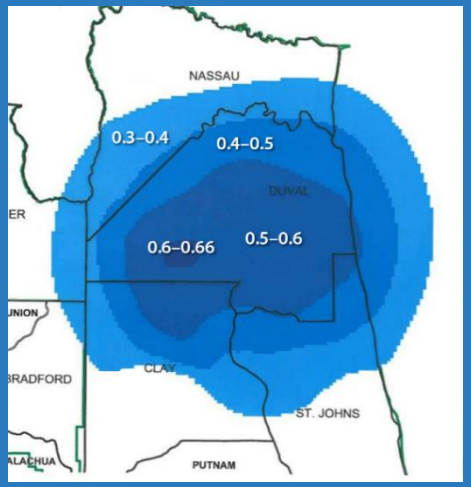
Diversification of Water Supplies: Excess Surface Water or Storm Water

Reuse Options

Augmentation of surface waters used for irrigation

Landscape irrigation

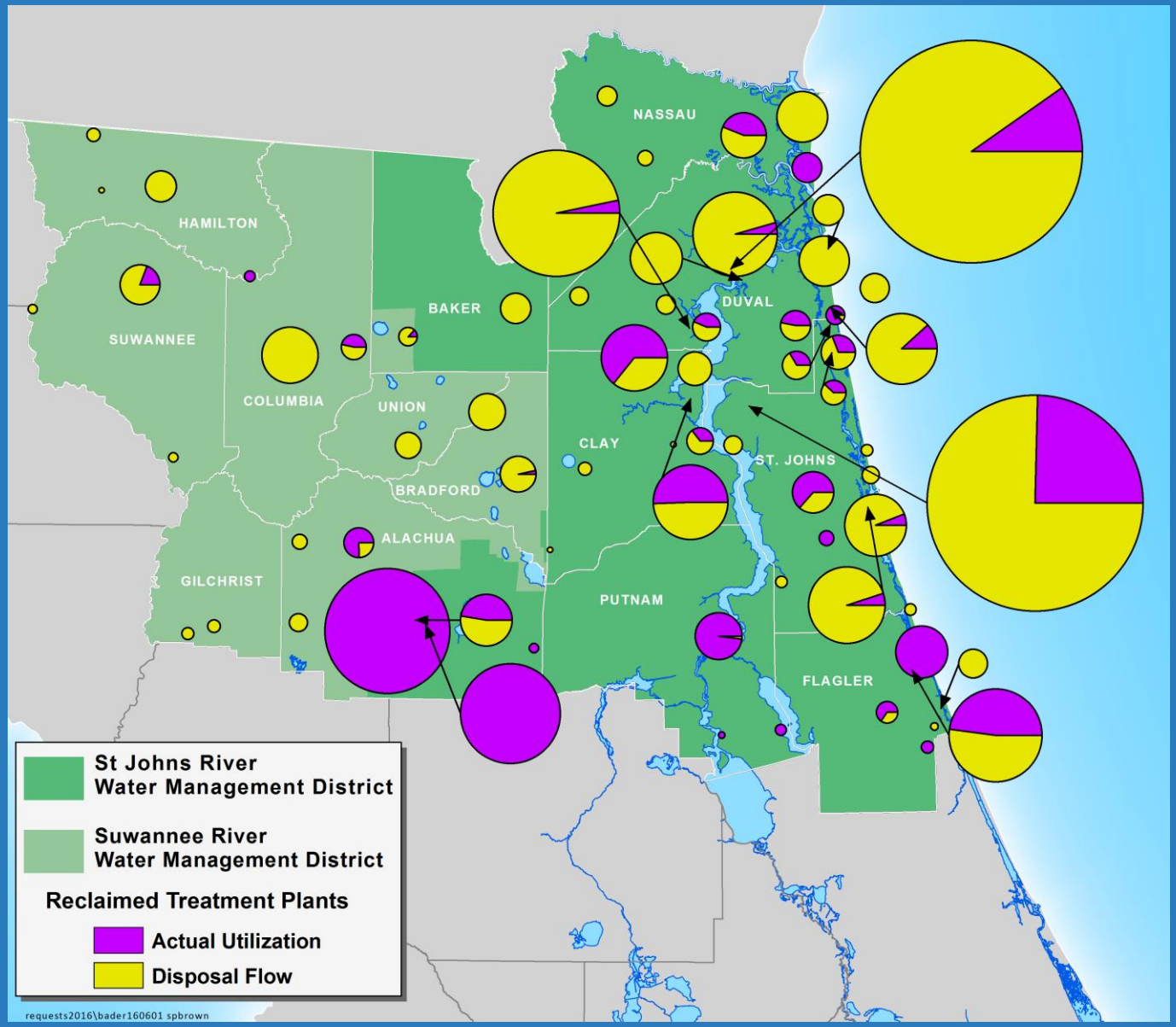
Recharge



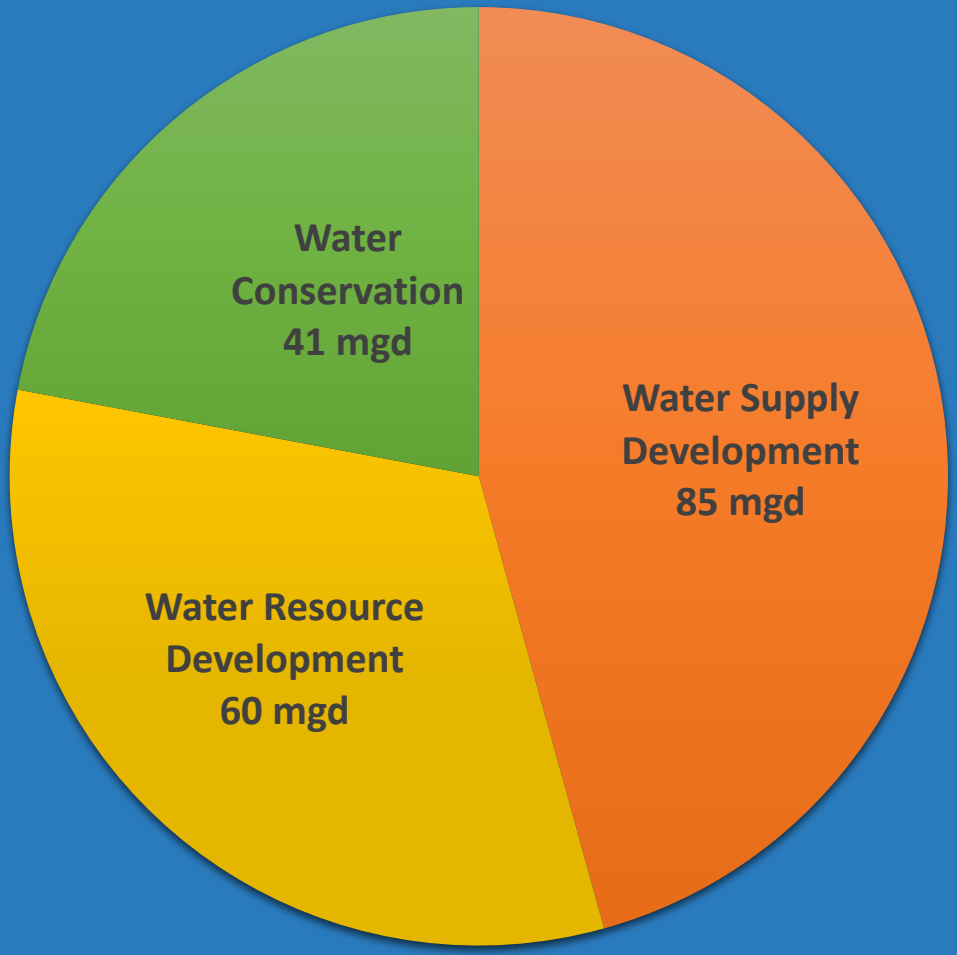
Potable reuse Rebound (in feet) for 10 MGD injection

Golf course irrigation

2015 Reuse and Wastewater Disposal



Meeting Future Demands



Importance of Collaboration

- Meet needs of commercial, agricultural, environment and urban uses
- Meet needs of recreational and quality of life
- Business and community leader engagement is vital
- Working together to meet all the needs will ensure a vital economy

Questions?