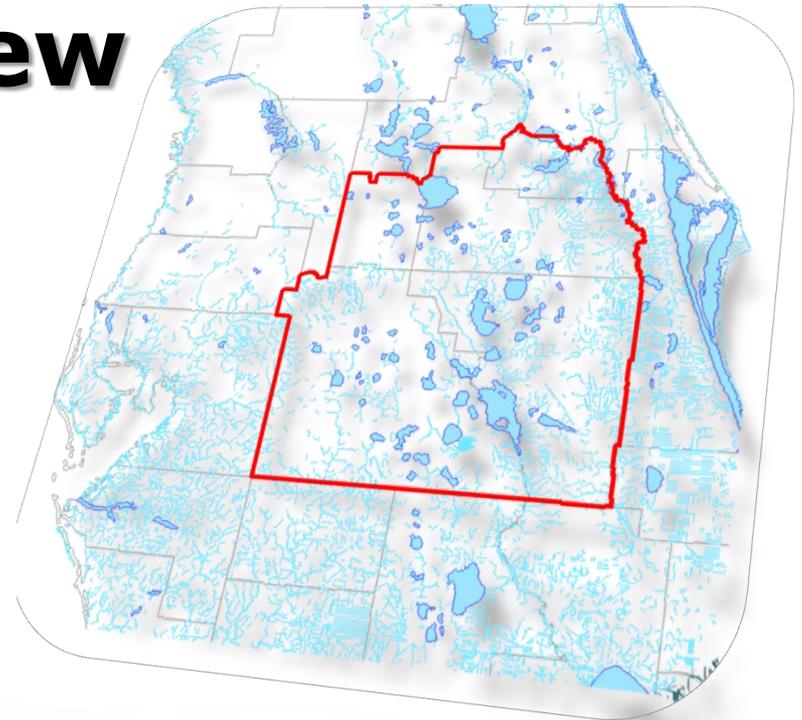


Central Florida Water Initiative (CFWI) Overview

*A collaborative water supply
planning endeavor to protect,
develop, conserve and
restore our water resources*

Public Workshop
September 26, 2013

John Shearer



Today's Presentation

- What is CFWI?
- Why is water supply planning important in central Florida?
- How are we addressing the challenges?



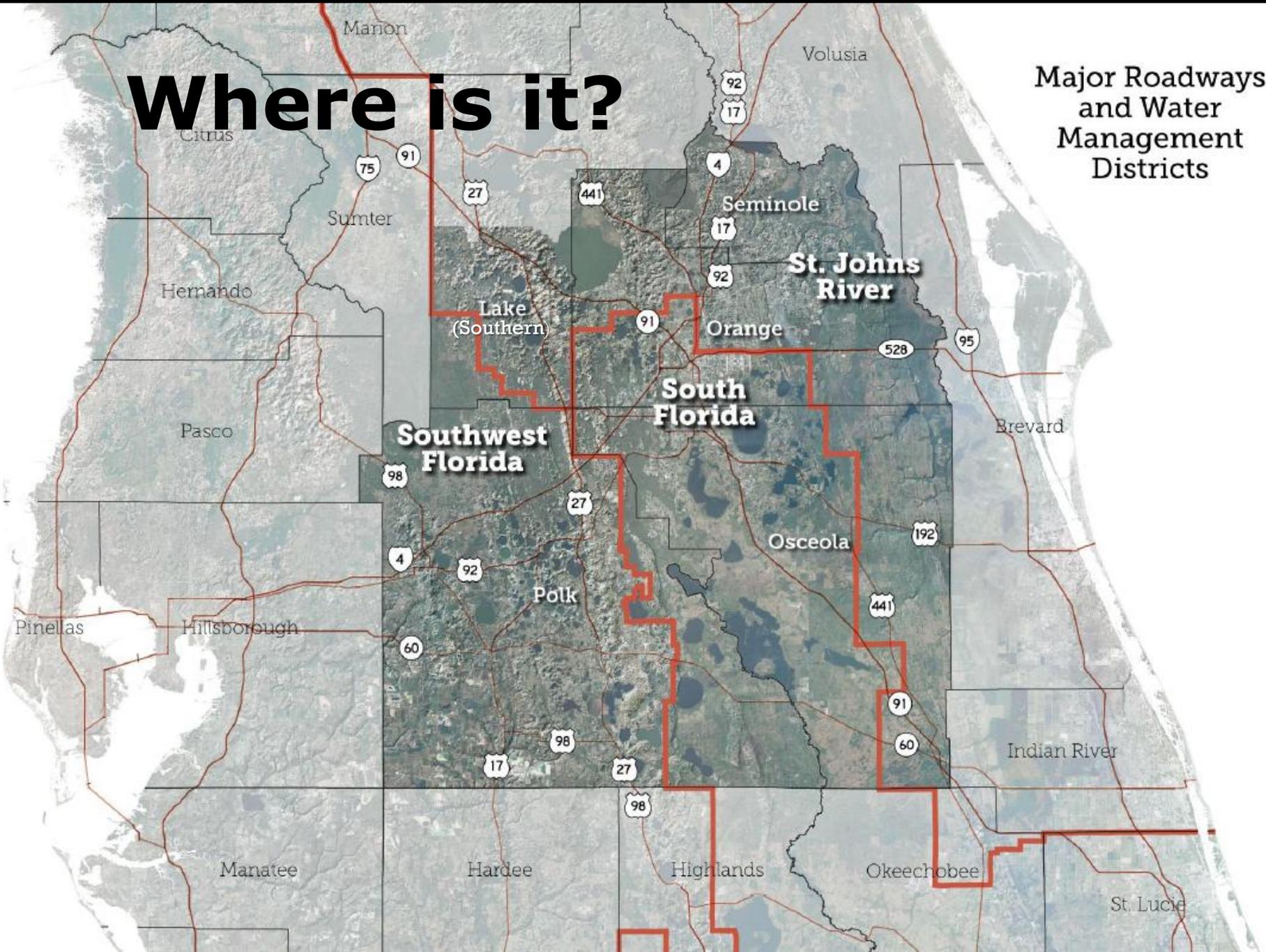
What is the CFWI?

A collaborative water supply planning effort to:

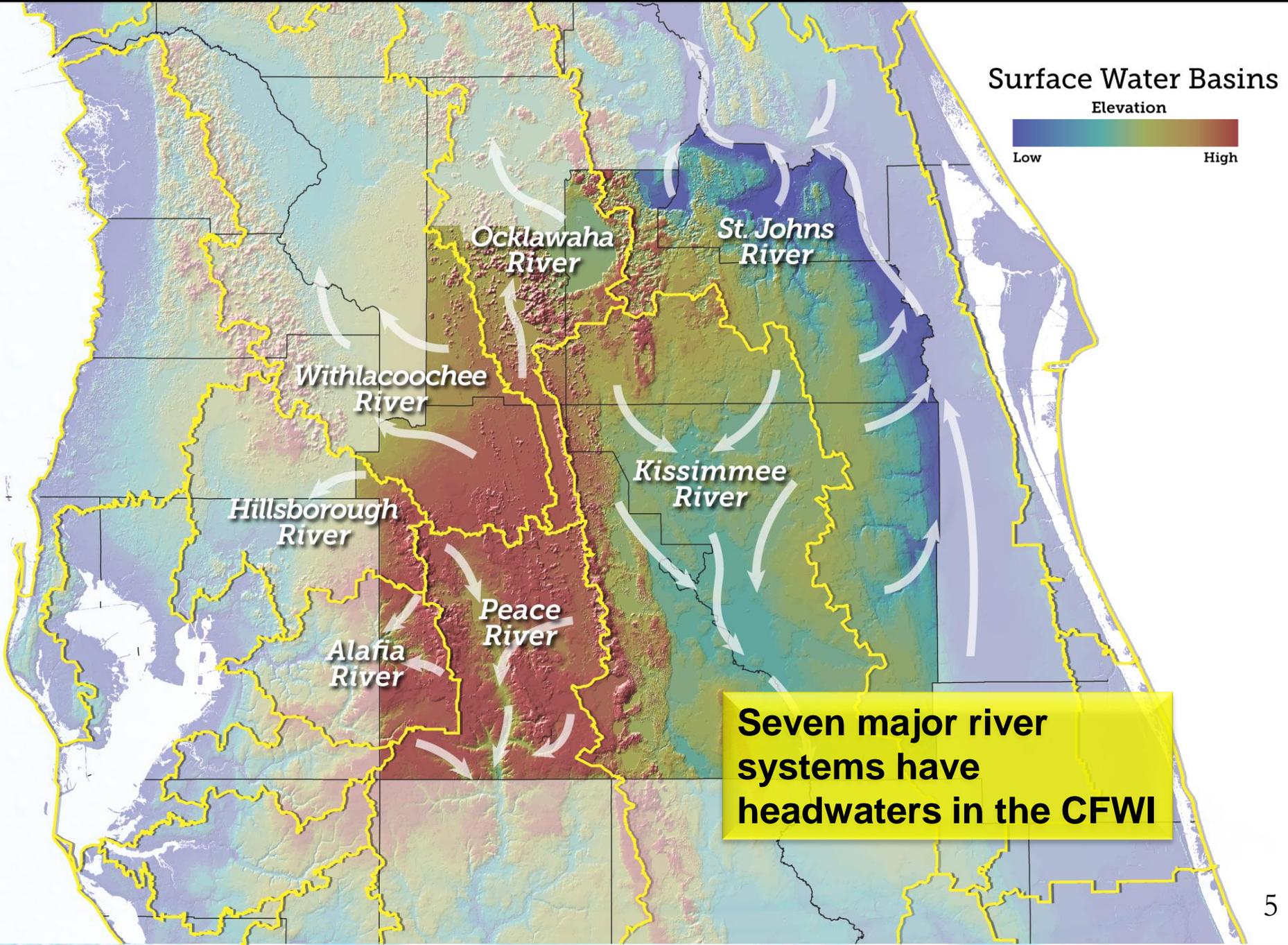
- Protect, develop, conserve and restore central Florida's water resources

Where is it?

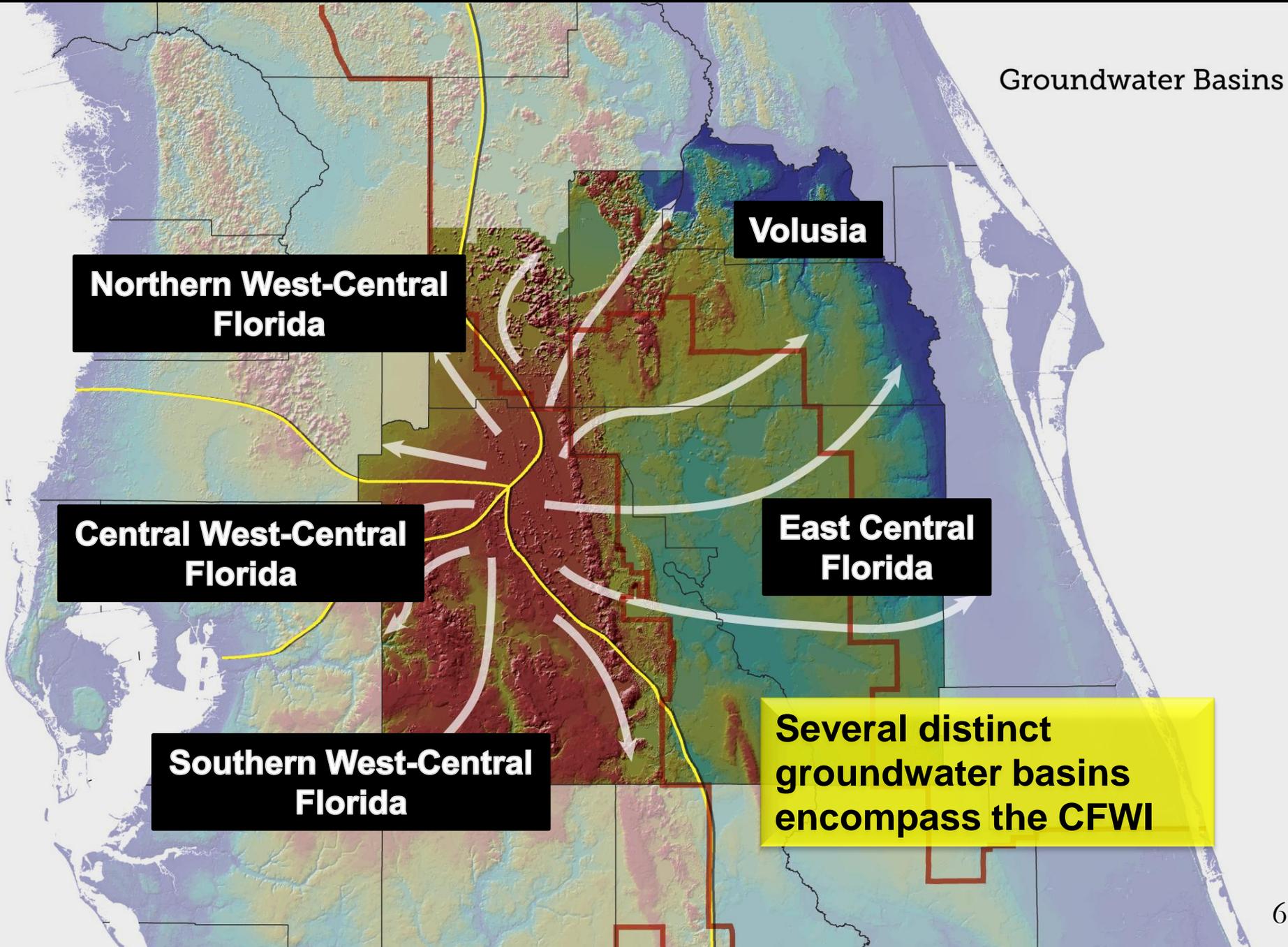
Major Roadways
and Water
Management
Districts



Central Florida Water Initiative



Central Florida Water Initiative



Groundwater Basins

**Northern West-Central
Florida**

Volusia

**Central West-Central
Florida**

**East Central
Florida**

**Southern West-Central
Florida**

**Several distinct
groundwater basins
encompass the CFWI**

What are the Challenges?

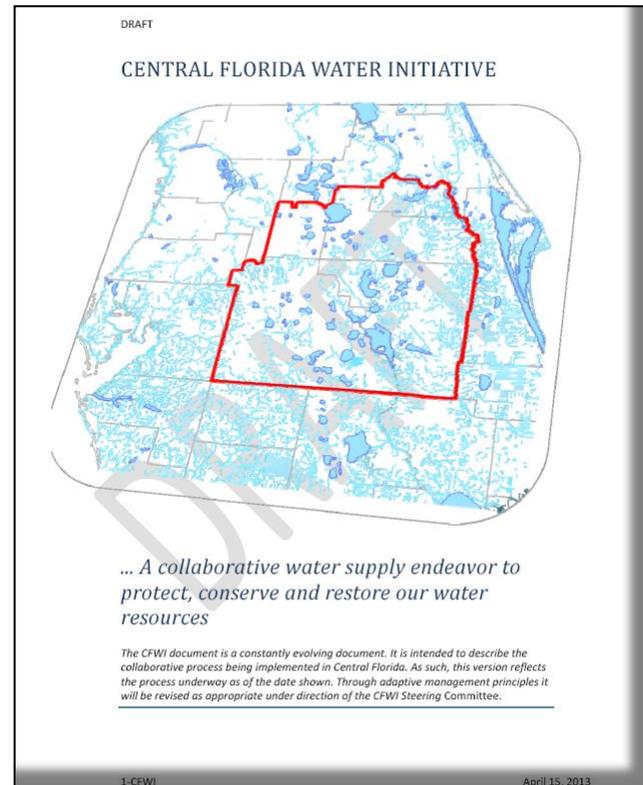
- Reaching sustainable groundwater limits
- Meeting future demands on the area's water resources
- Overlapping regulatory programs

CFWI Steering Committee

- Includes one representative each from:
 - Florida Department of Agriculture & Consumer Services (FDACS)
 - Florida Department of Environmental Protection (FDEP)
 - St. Johns River Water Management District Governing Board
 - South Florida Water Management District Governing Board
 - Southwest Florida Water Management District Governing Board
 - Utilities

Steering Committee

- Primary oversight to guide a coordinated effort
- Guidance Document outlines the process based on three Guiding Principles



Guidance Document available at CFWIwater.com

Guiding Principles (simplified)

1. Identify sustainable quantities of groundwater sources
2. Develop strategies to meet water demands
3. Establish consistent rules

Addressing the Challenges

- One shared groundwater model
- One coordinated strategy for Minimum Flows & Levels (MFLs)
- One Regional Water Supply Plan (RWSP)

CFWI Timeline

Ongoing

Technical Teams:

- Data Monitoring & Investigations
- Environmental Measures
- Groundwater Availability
- Hydrologic Analysis
- MFLs & Reservations
- Regional Water Supply Plan

Nov. 30, 2013

Technical Work:

- Findings & Conclusions
- Draft Regional Water Supply Plan

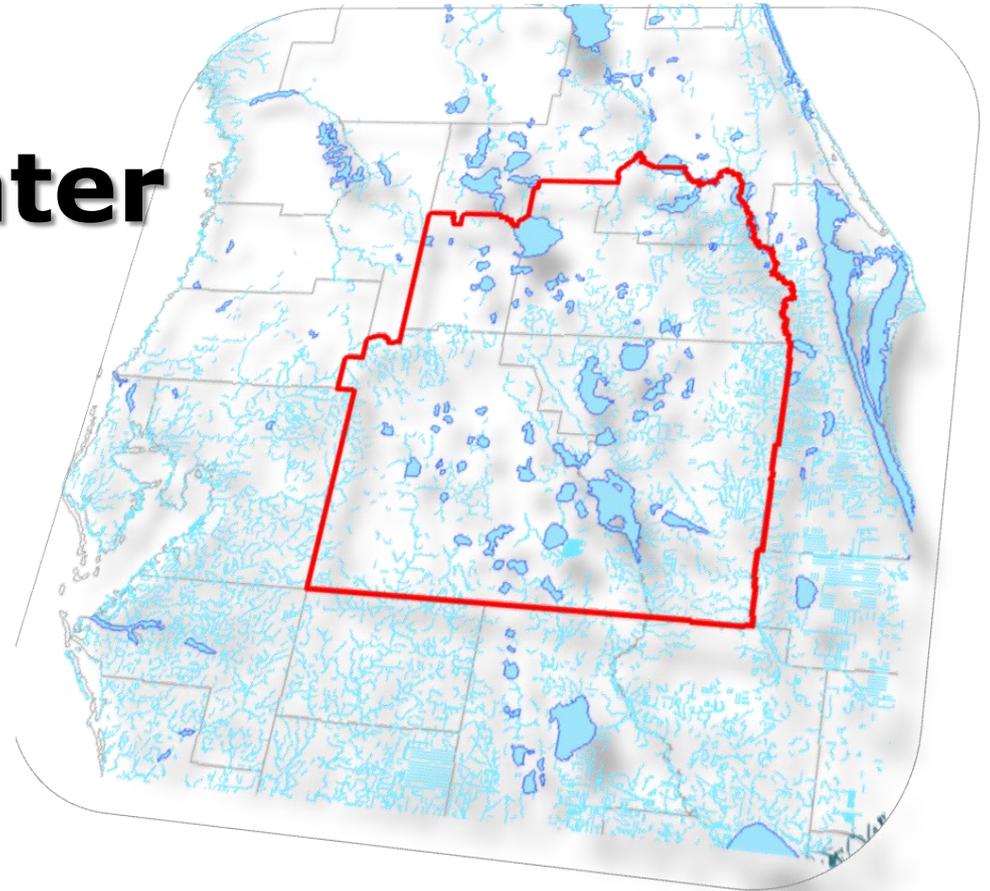
Dec. 31, 2014

Solutions Work:

- Projects
- Regulatory
- Financing
- Monitoring

CFWI Regional Water Supply Plan

Public Workshop
September 26, 2013



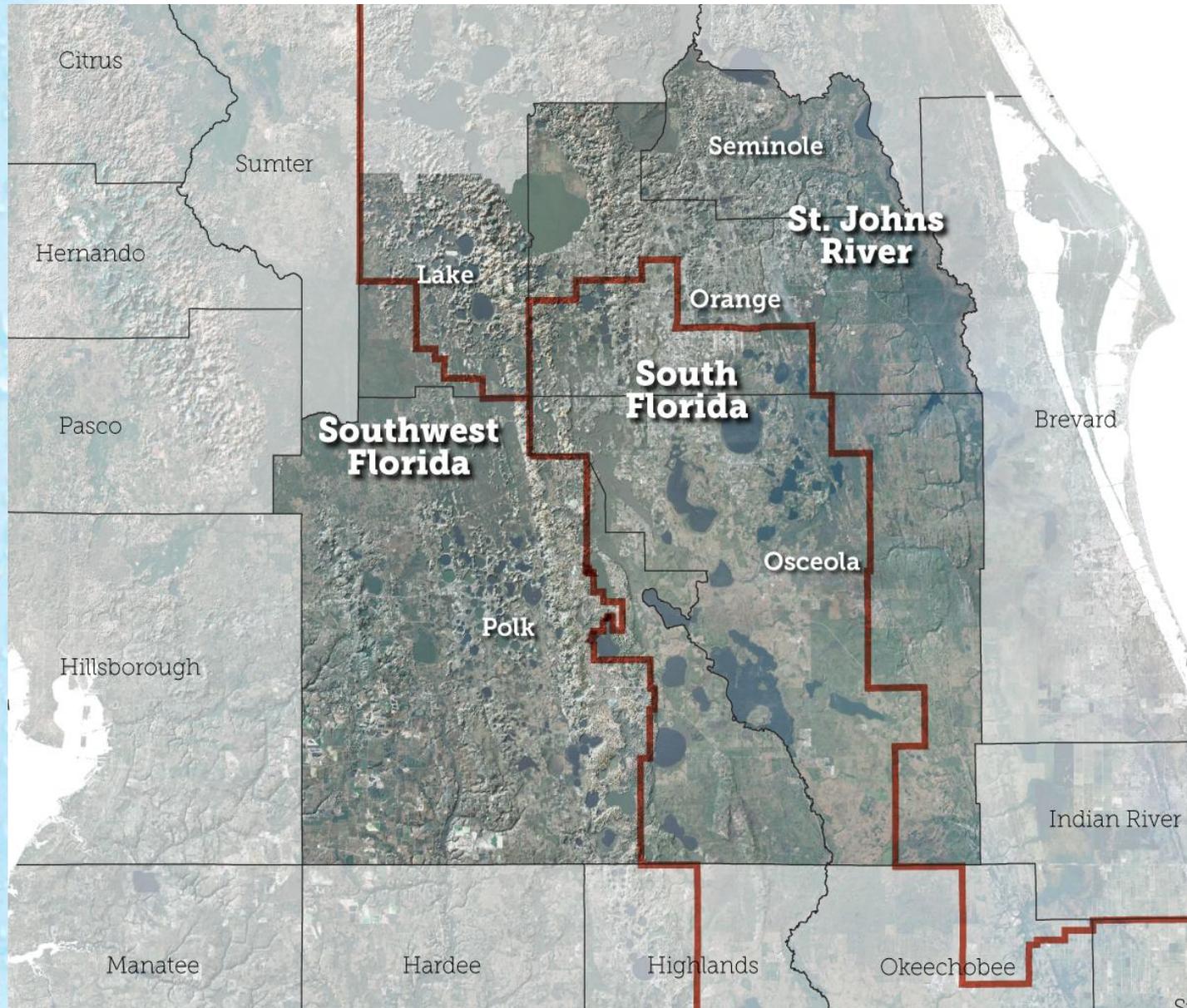
Tom Bartol, P.E
Chief, Bureau of Water Supply

Today's Presentation

- What is a regional water supply plan?
- What are the components?
- Evaluation findings
- Importance of public involvement
- Opportunities for public participation

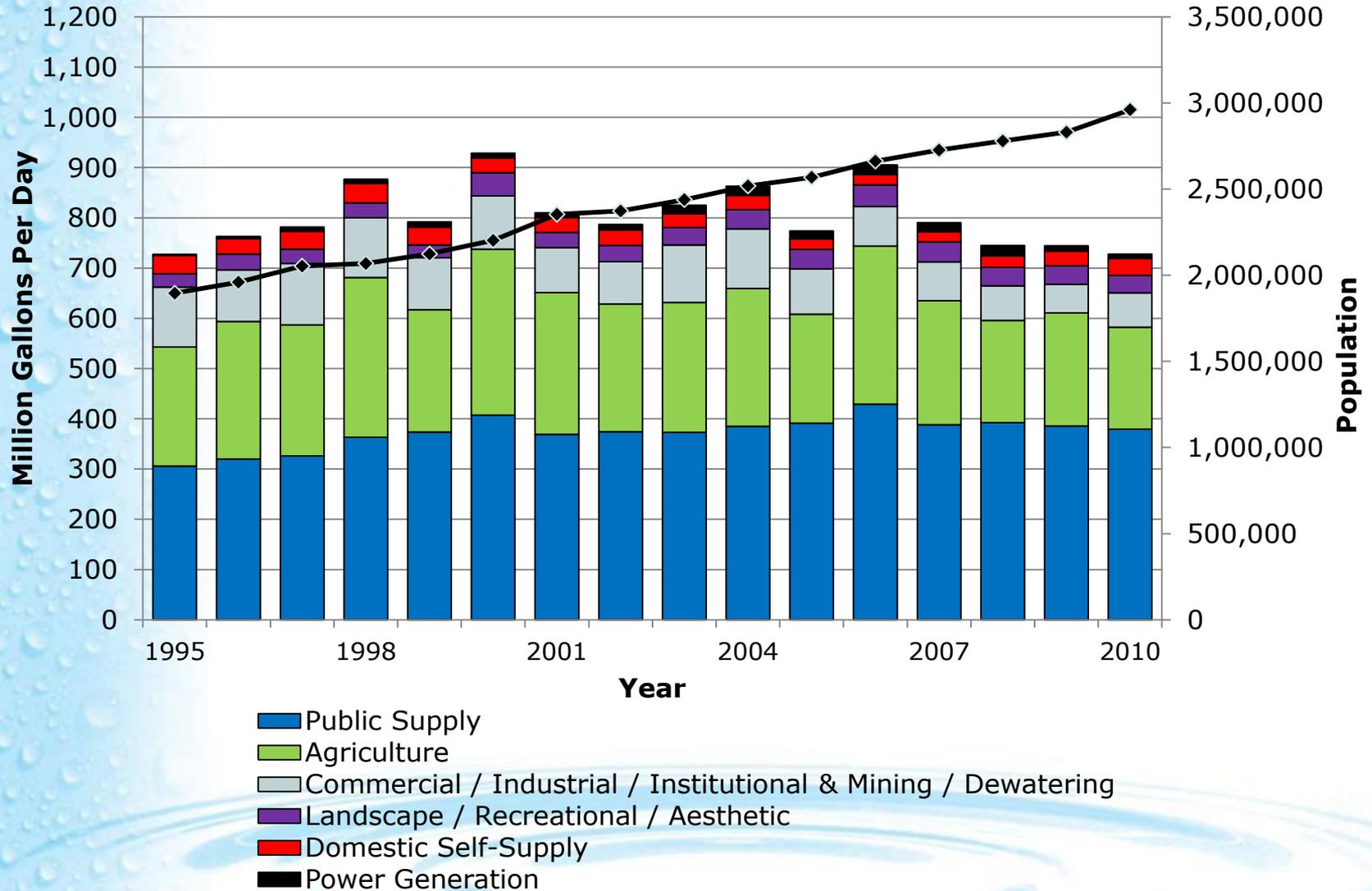


Central Florida Water Initiative



Central Florida Water Initiative

Historic Water Use vs. Population in the CFWI



Water Use

All Classes

MGD

1200

1000

800

600

400

200

0

1960

1970

1980

1990

2000

2010

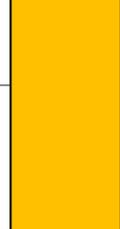
2020

2030

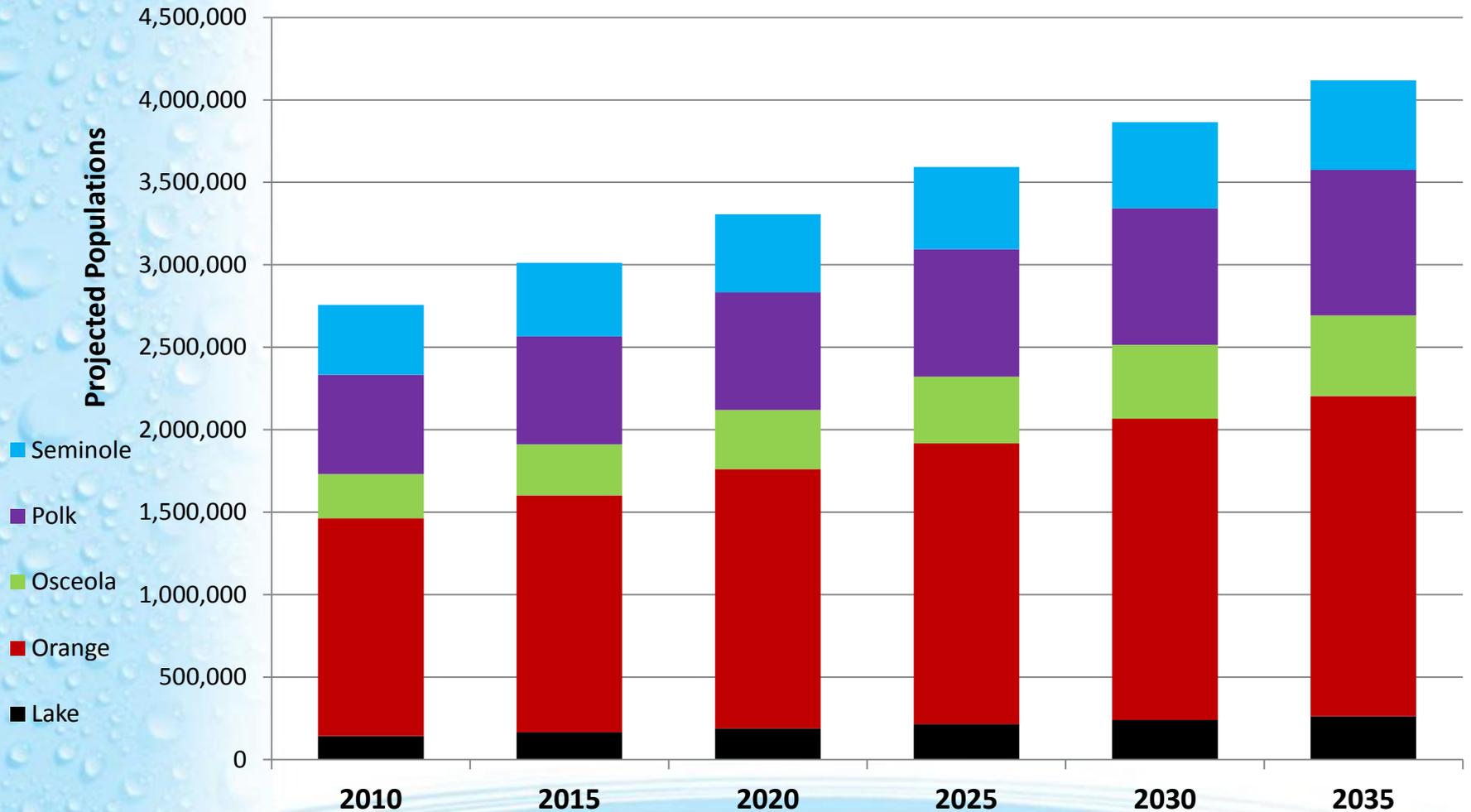
2035

Historic

Projected

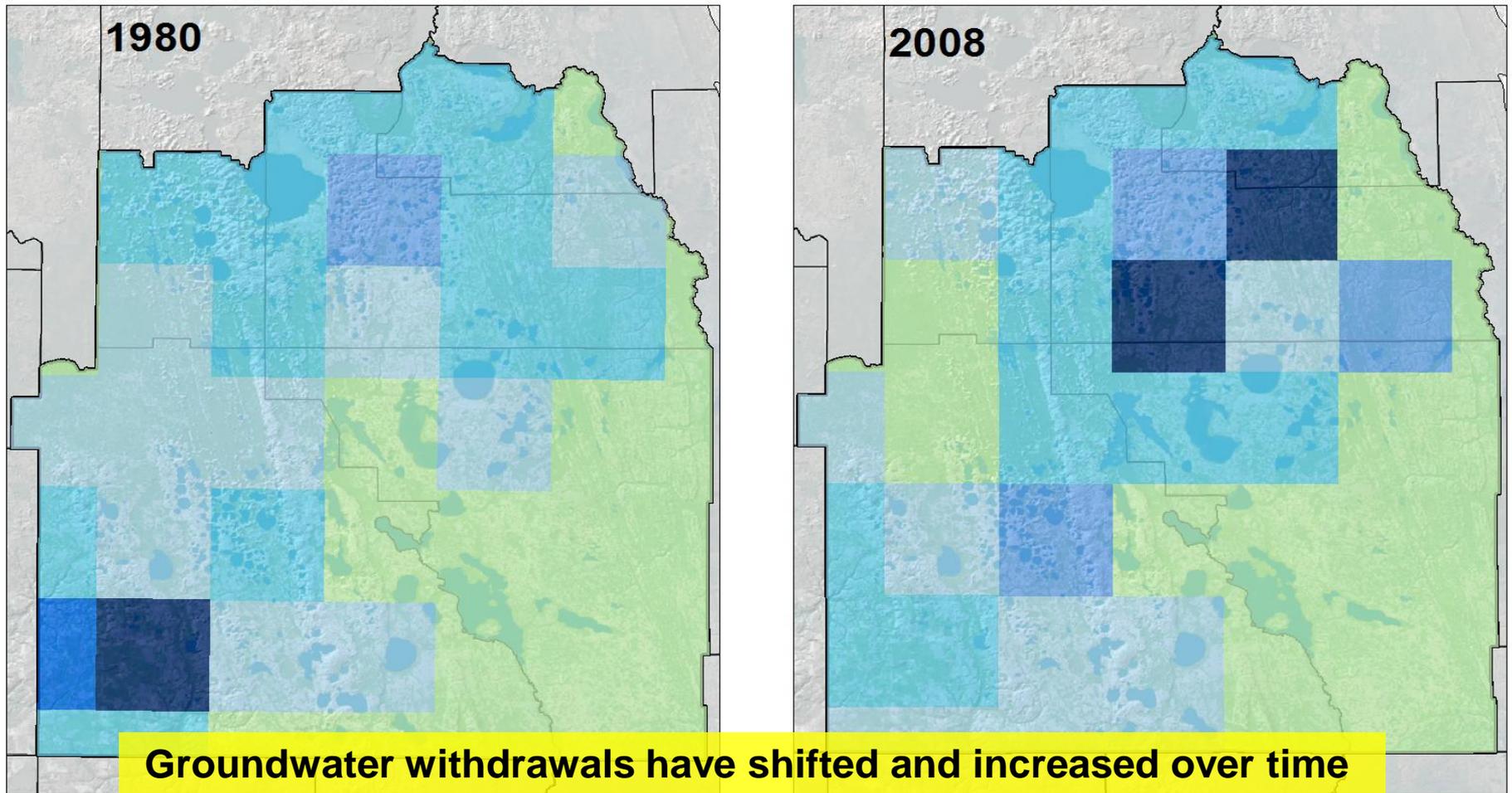


Projected Population

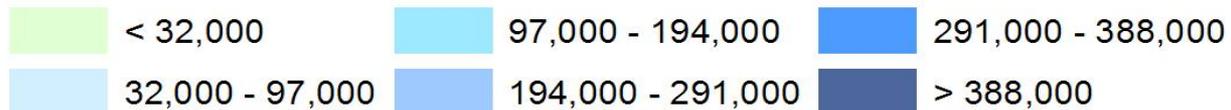


Projected Increase of 1.4 Million People

Generalized Map of Historical Groundwater Withdrawals



Withdrawals in Gallons per Day per Square Mile



One Plan for CFWI Region

- Developing first-ever regional water supply plan for CFWI
- Ensuring protection of the water resources and related natural systems
- Identifying sustainable water supply for all water uses in the CFWI through the 20-year planning horizon (2035)

Regional Water Supply Plan

- Demands from all categories
 - 20-year planning horizon
- Evaluation of water resources
- How to meet the demands
 - Potential sources
 - Project options
- Funding mechanisms
- Update every 5 years



Water Resource Evaluation

- Future demands estimated and aquifer changes evaluated
- Availability of groundwater determined from multiple measuring sticks to ensure protection of water resources and existing water users

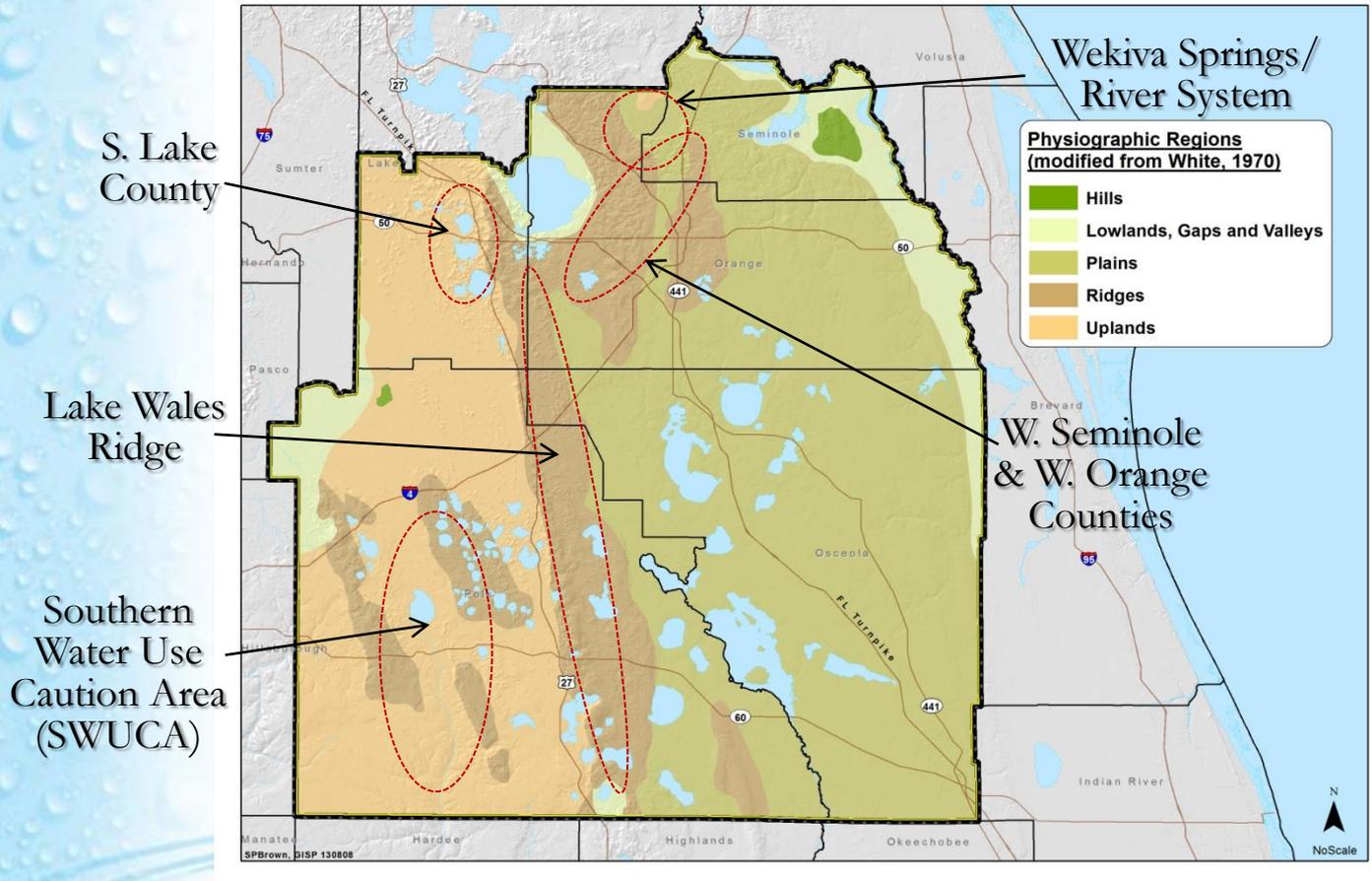
Groundwater Availability Measuring Sticks

- Water bodies with established and proposed minimum flows and levels (MFLs) within the CFWI
 - Regulatory constraints including Southern Water Use Caution Area (in Polk County)
- Non-MFL lakes/wetlands
- Non-MFL springs
- Aquifer water quality/saltwater intrusion

Findings

- Traditional groundwater sources can meet some, but not all projected and currently permitted needs in the CFWI.

Primary Areas Susceptible to Groundwater Withdrawals



Minimum Flows and Levels

- Established MFLs for 46 water bodies
- 10 water bodies currently below MFLs
- 25 additional water bodies projected to fall below MFLs

Water Quality/Saltwater Intrusion

- Southern Water Use Caution Area Saltwater Intrusion Minimum Aquifer Level – not met
- Lake Wales Ridge regulatory wells water levels – not met

CFWI Planning Level Groundwater Availability Estimates

■ 800 mgd

- Average groundwater use (1995 to 2010)
- Includes some management activities

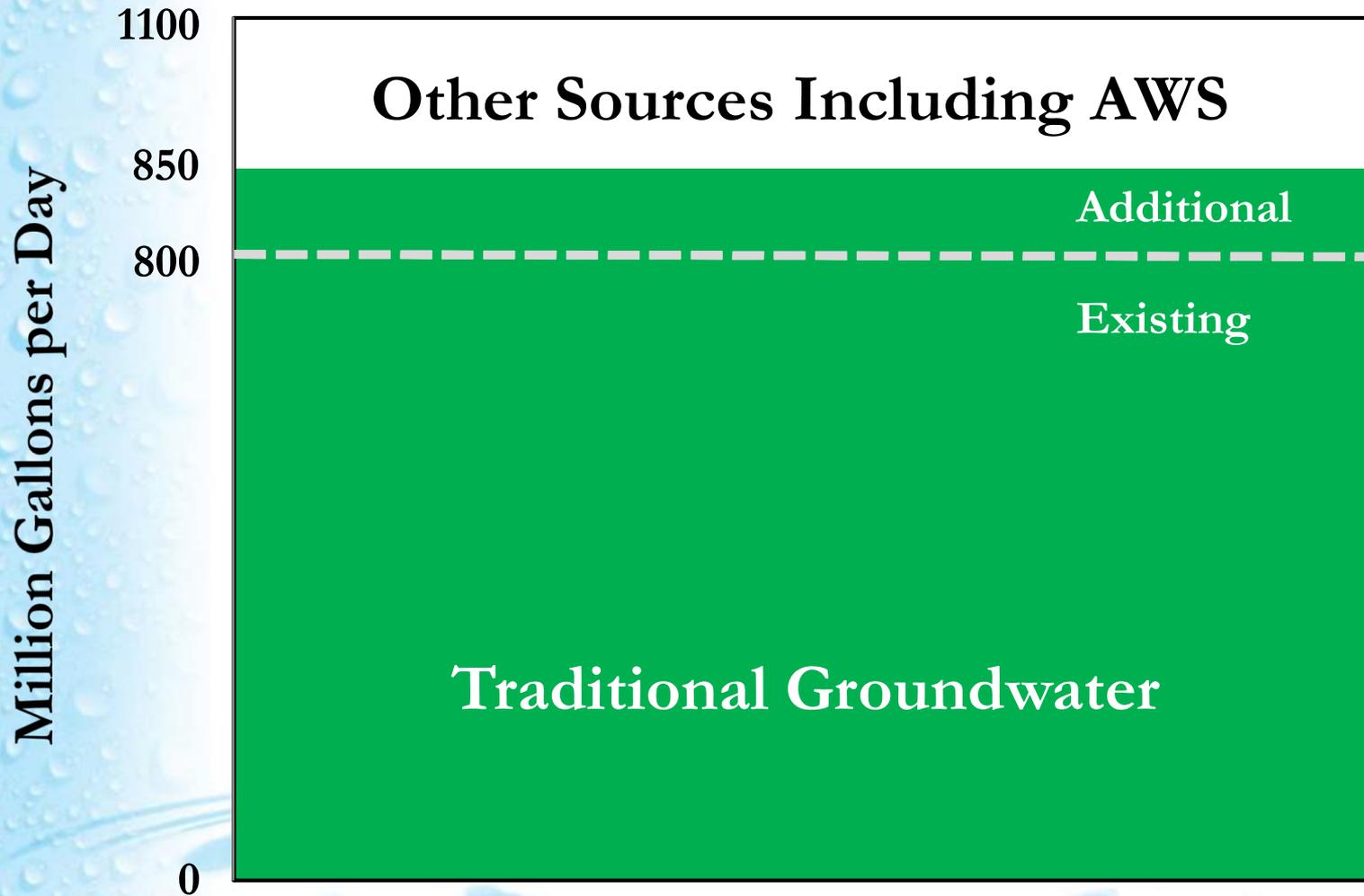
■ 850 mgd

- Sustainable level of traditional groundwater sources available for water supply without causing unacceptable harm to water resources and associated natural systems

■ 250 mgd

- Amount of new water supply options needed in the RWSP (difference between 2035 projected demands and sustainable level using existing sources)

Sources to Meet 2035 Demands



Water Supply Options

- Conservation
- Brackish Groundwater
- Surface Water
- Sea Water
- Reclaimed Water
- Storage Capacity

Water Supply Projects Identified

- Reclaimed Water - 81
- Brackish Water - 35
- Surface Water - 16
- Management Strategies - 3

Water Supply Project Options

County	Reclaimed Water	Brackish Water	Surface Water	Management Strategies	Total
Orange	52	10	47	0	109
Osceola	28	17	4	0	49
Polk	19	18	15	6	58
Lake (southern)	7	0	5	0	12
Seminole	16	0	92	0	108
Total MGD	122	45	163	6	336

MGD = Million gallons per day

Water Conservation

- Promotes water use efficiency
- Increases available supply of water from existing sources
- Includes all water use categories
- Uses Conserve Florida EZ Guide
- Increases savings agricultural mobile irrigation labs

Water Conservation Estimates

Water Use Category	Projected 2035 Conservation
Public Supply	27
Domestic Self-supply	1
Agriculture Self-supply	11
Recreation/Aesthetic Self-supply	2
Commercial/Industrial/Institutional Self-supply	1
Power Generation Self-supply	0
Total MGD	42

MGD = Million gallons per day

Stakeholders



Local Government Requirements



After the Districts update the Regional Water Supply Plan:

- Local governments must amend their comprehensive plan to include a 10-year Water Supply Facilities Work Plan within 18 months of RWSP update and submit to Dept. of Economic Opportunity (DEO)
- Work Plan must demonstrate sufficient water supply for at least next 10 years
- Identify the projects to be developed

Importance of Public Involvement

- Ensure plan reflects local needs
- Review of population projections and documents
- Coordination among:
 - County Commission/City Council
 - Utility staff
 - Planning staff
- Identify projects to meet future water demand



Public Involvement Schedule

Components	Time Frame
Briefings/Presentations	Ongoing
Technical Methods Workshop Osceola Heritage Park (Osceola)	Nov. 7, 2013 10 a.m.– noon
Draft RWSP Public Workshop Clermont Community Center (Lake)	Dec. 12, 2013 4–7 p.m.
Draft RWSP to WMD Governing Boards St. Johns River WMD South Florida WMD Southwest Florida WMD	Dec. 2013 Dec. 10 Dec. 12 Dec. 17

RWSP Public Comment & Adoption

- Draft Plan Available – November 26, 2013
 - 45-day comment period
 - Ends January 10, 2014

- Draft Plan Adoption (tentative)
 - SJRWMD Governing Board: April 8, 2014
 - SFWMD Governing Board: April 10, 2014
 - SWFWMD Governing Board: April 29, 2014

Next Phase: Solutions

- Strategies to meet future water demands:
 - Optimize use of existing groundwater
 - Identify demand management activities
 - Identify viable alternative supplies
 - Establish consistent rules

Solutions Planning

REPRESENTING	PRIMARY
<p>Water Management Districts</p>	<p>Robert Beltran (SWFWMD) CHAIR W. Boynton (SJWMD) Len Lindahl (SFWMD)</p>
<p>Florida Department of Environmental Protection</p>	<p>Tom Beck (DEP Office of Water Policy)</p>
<p>Agriculture</p>	<p>Jim Fletcher (IFAS Osceola County)</p>
<p>Public Water Suppliers</p>	<p>Andy Neff (Seminole County) Gary Fries (Polk County)</p>
<p>Environmental Community (recommended by Audubon Florida)</p>	<p>Milissa Holland</p>
<p>Congress of Regional Leaders</p>	<p>Bob Dallari (Seminole County Commission)</p>
<p>Central Florida Partnership</p>	<p>Michael Minton (Dean Mead)</p>

Upcoming Public Workshops

- Please join us...

Technical Methods Workshop

Thurs., Nov. 7 from 10 a.m. – noon

Osceola Heritage Park (Osceola Co.)

1875 Silver Spur Ln., Kissimmee, FL

Draft RWSP Public Workshop

Thurs., Dec. 12 from 4 – 7 p.m.

Clermont Community Center (Lake Co.)

620 W. Montrose St., Clermont, FL

Central Florida Water Initiative

Home

- Meetings
- Regional Water Supply Plan
- Minimum Flows and Levels and Water Reservations
- Hydrologic Analysis
- Environmental Measures
- Data, Monitoring and Investigations
- Groundwater Availability
- CFWI Resources
- CFCA Resources
- Contacts

Overview of the Central Florida Water Initiative

Florida's water management districts are committed to finding new ways of meeting the demand for freshwater. Historically, the Floridan aquifer system has supplied the vast majority of the water used in the central Florida area. The boundaries of three water management districts — the St. Johns River Water Management District, South Florida Water Management District and Southwest Florida Water Management District — meet in the area. The three districts are studying whether the Floridan aquifer system is reaching its sustainable limits of use and exploring the need to develop supplemental sources of water.

In the past, the three districts worked independently to resolve water resource issues, but the decisions of one district can impact the water resources of another. Today, the districts are working collaboratively with other agencies and stakeholders to implement effective and consistent water resource planning, development and management through the Central Florida Water Initiative (CFWI).

The CFWI builds on the prior work of the Central Florida Coordination Area (CFCA). Both efforts focus on an area that includes southern Lake, Orange, Osceola, Seminole and Polk counties. The three water management districts, along with the Florida Department of Environmental Protection (DEP), Florida Department of Agriculture and Consumer Services (FDACS), regional public water supply utilities and other stakeholders are collaborating to develop a unified process to address central Florida's current and long-term water supply needs.

Guiding principles

The guiding principles of the CFWI are to:

- Identify the sustainable quantities of traditional groundwater sources available for water supplies that can be used without causing unacceptable harm to the water resources and associated natural systems.
- Develop strategies to meet water demands that are in excess of the sustainable yield of existing traditional groundwater sources.
- Establish consistent rules and regulations for the three water management districts that meet their collective goals, and implement the results of the Central Florida Water Initiative.

Questions may be sent to the contacts listed on the home page of the **CFWI** website at any time.

Additional information can be found at ***cfwiwater.com***