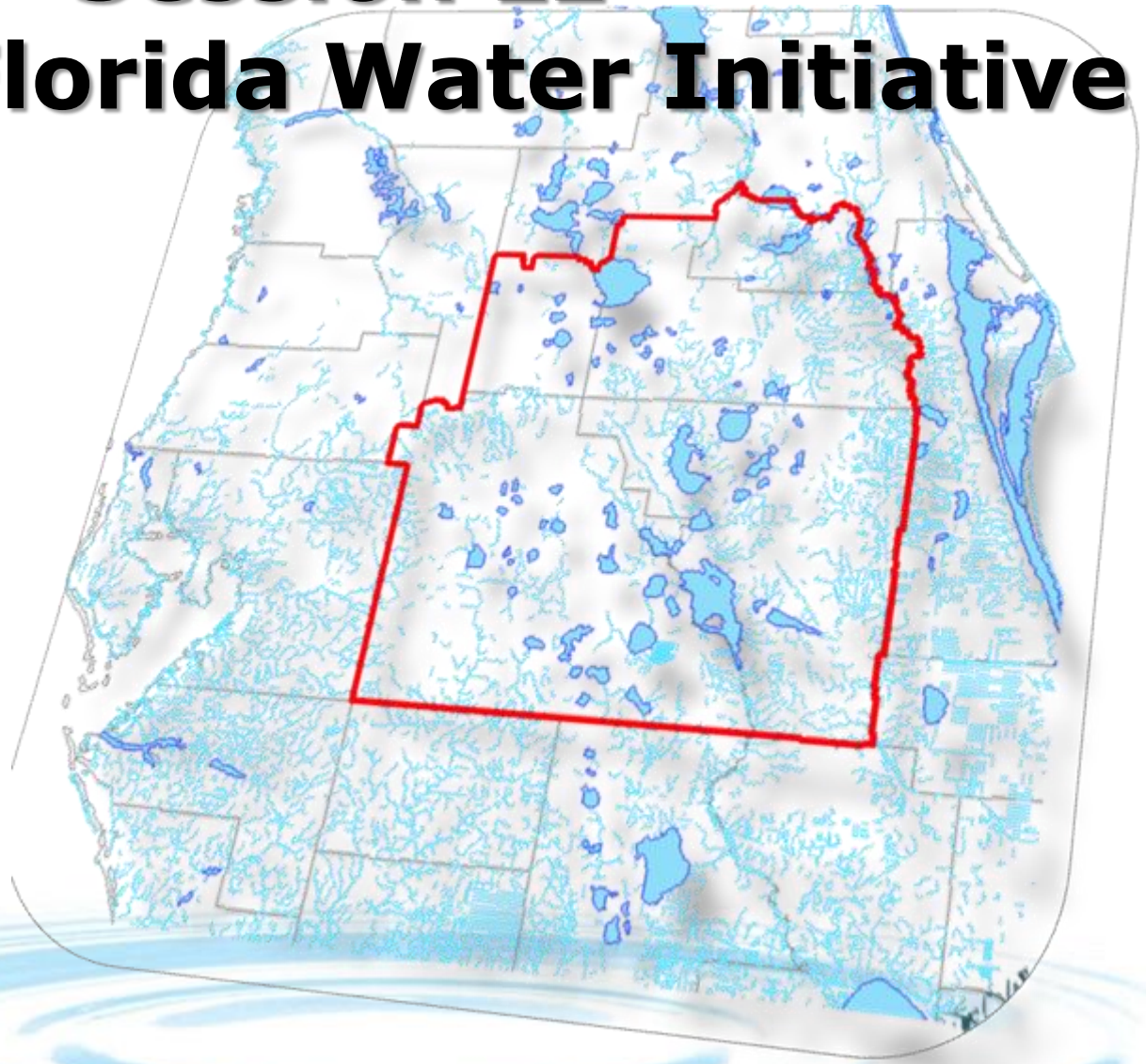


Session LL

Central Florida Water Initiative

Andy Neff
Drew Bartlett
Robert Beltran
Len Lindahl
Eric Olsen

July 23, 2014



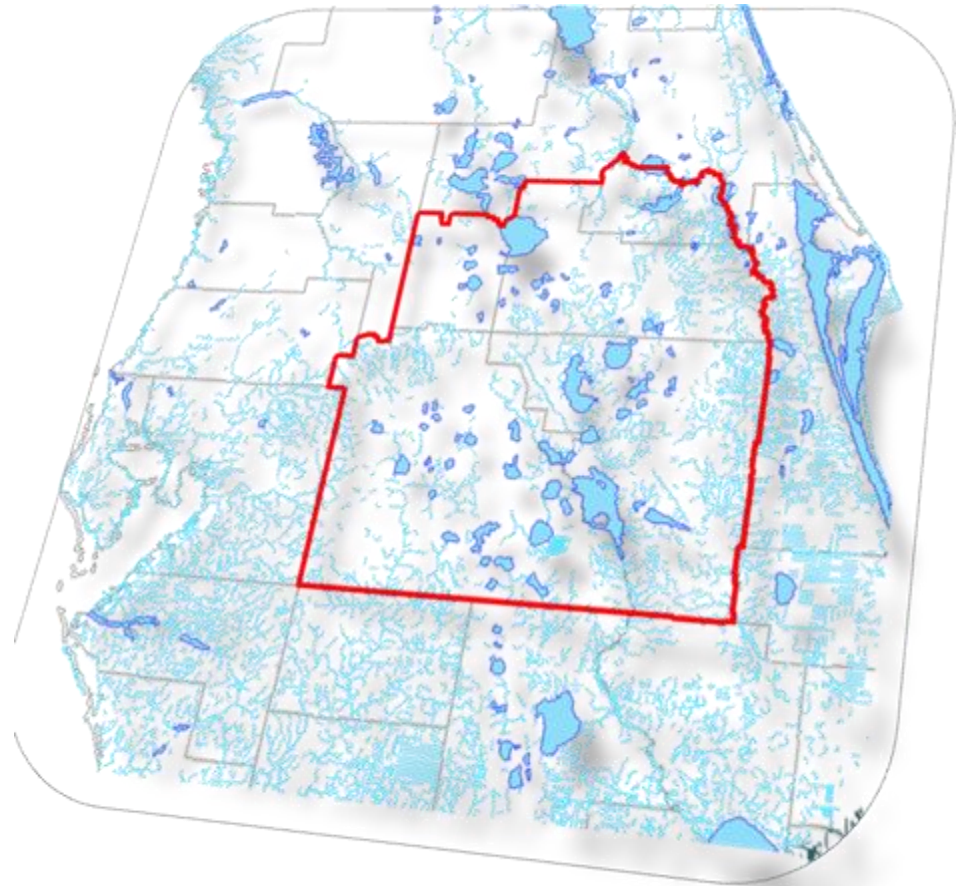
Today's Presentation

■ Central Florida Water Initiative

- ❖ History of CFWI
- ❖ Organization
- ❖ Solutions
- ❖ Regulatory
- ❖ User Perspective



History

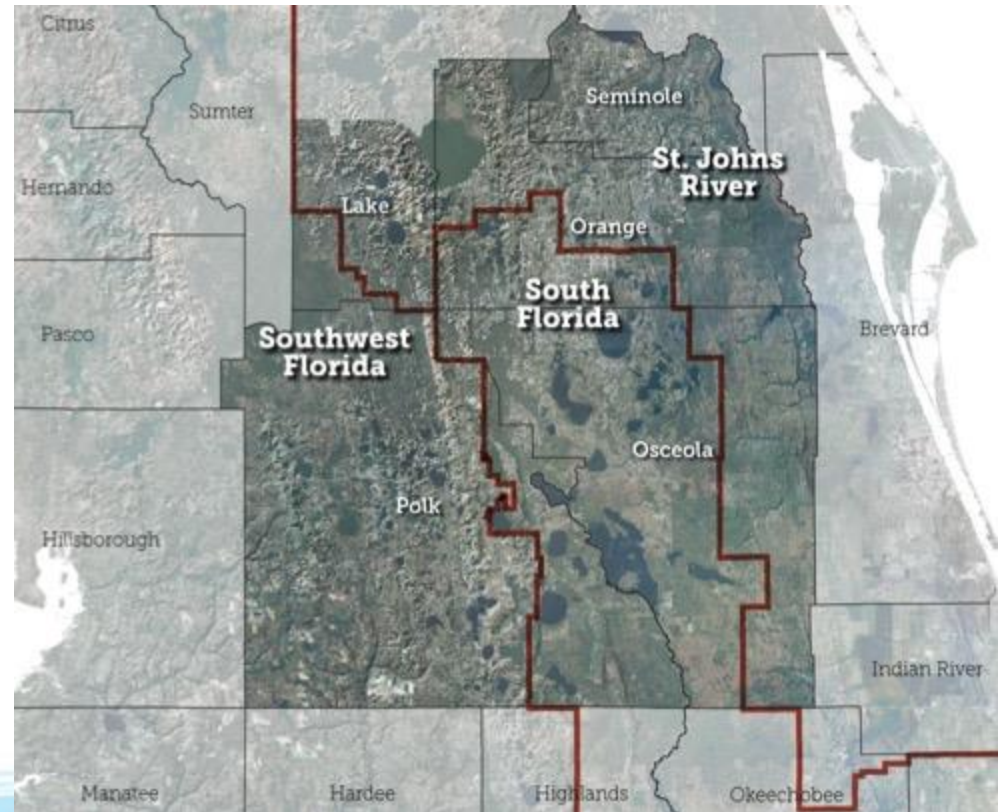


Andy Neff

Director, Environmental Services
Seminole County

What is the CFWI?

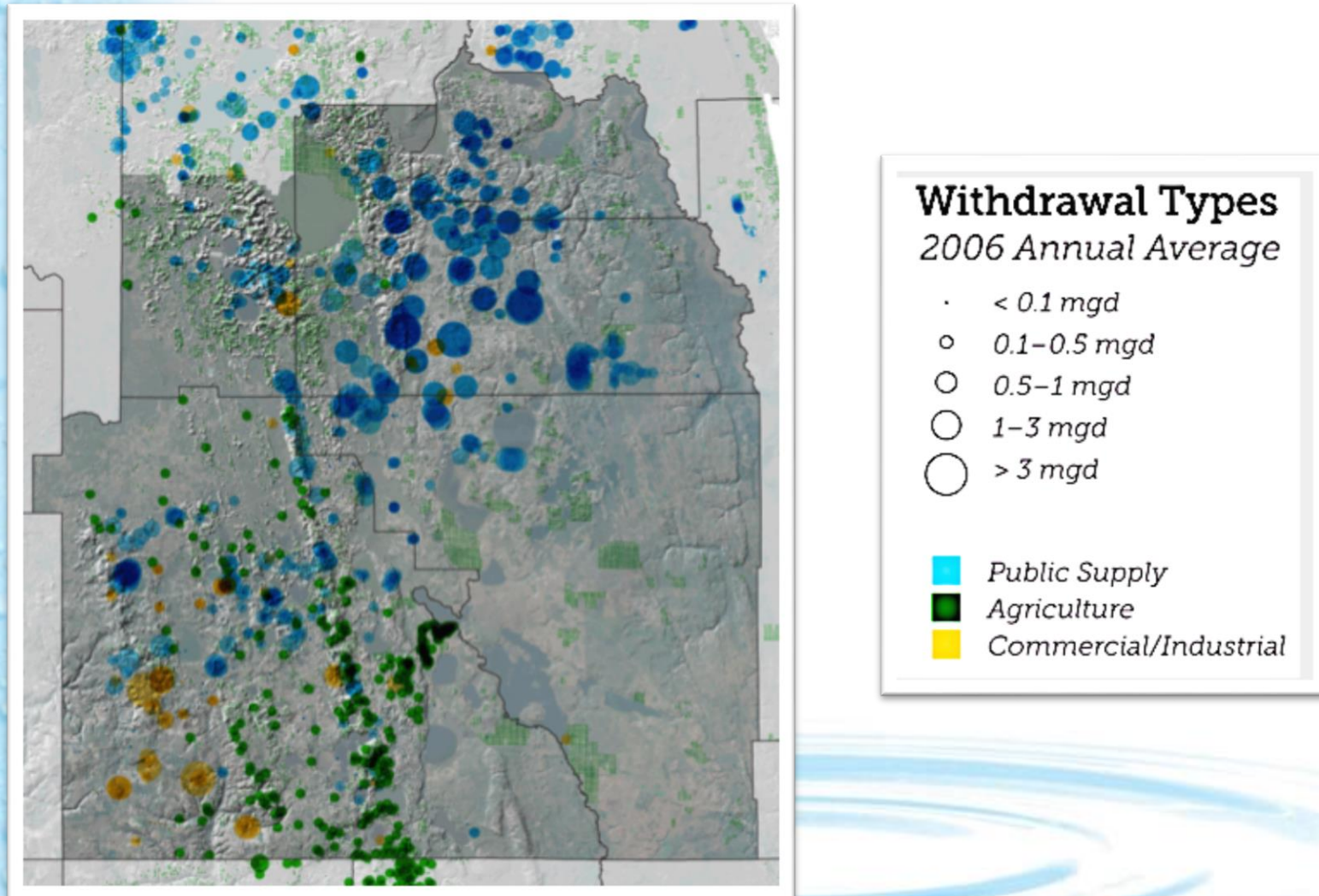
A collaborative water supply planning effort to protect, develop, conserve and restore central Florida's water resources.



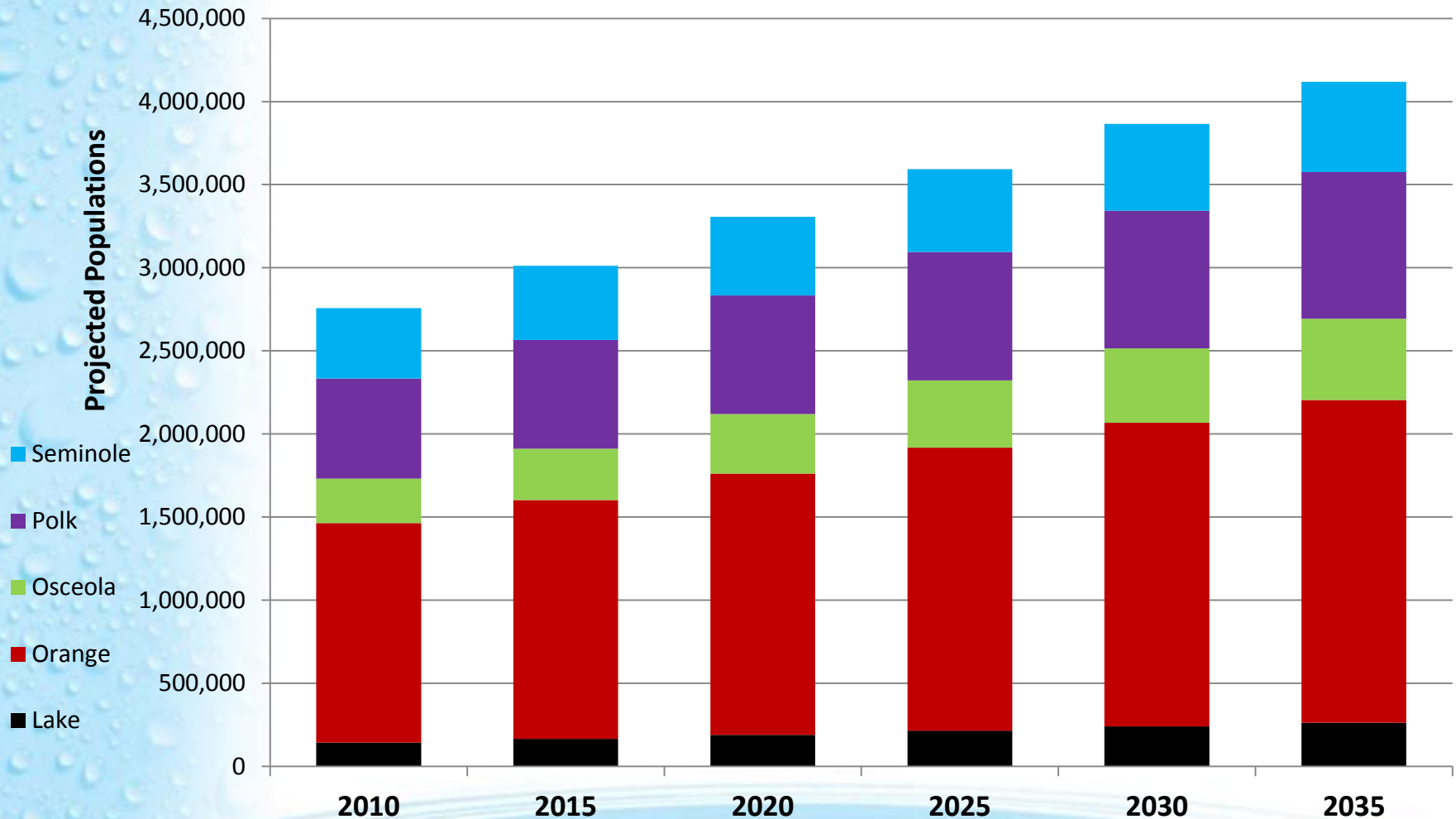
What Are the Challenges?

1. Reaching sustainable groundwater limits
2. Meeting future demands on the area's water resources
3. Overlapping regulatory programs

Users Seeking a Limited Resource



Projected Population

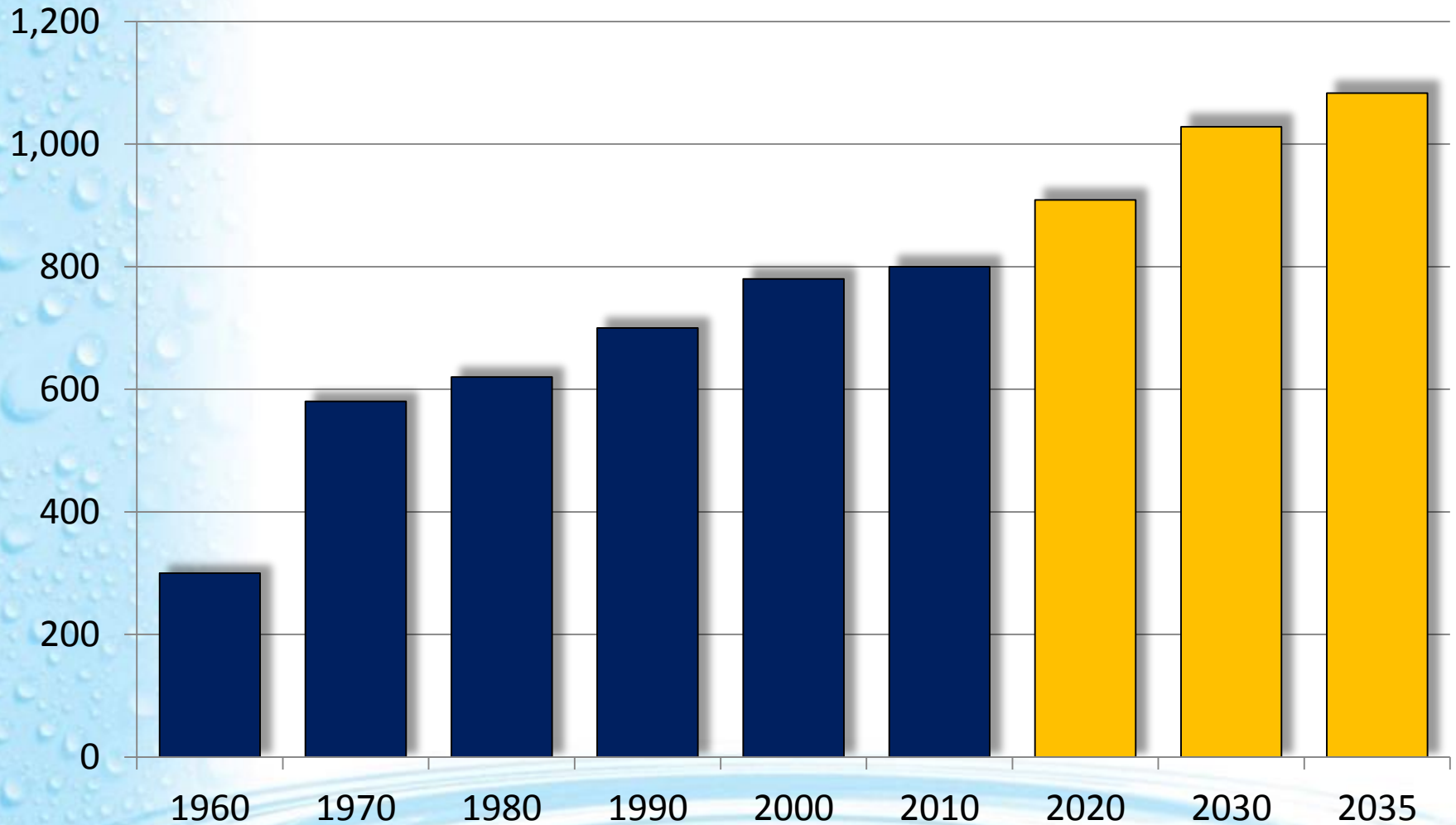


Projected Increase of 1.4 Million People

Water Use

All Classes

MGD



Historic

Projected



How Did We Get Here?

- February 2006 – Legal Action
 - SFWMD intervened in Orange County's water use permit issued by SJRWMD permit; Gov. Bush

Phase I

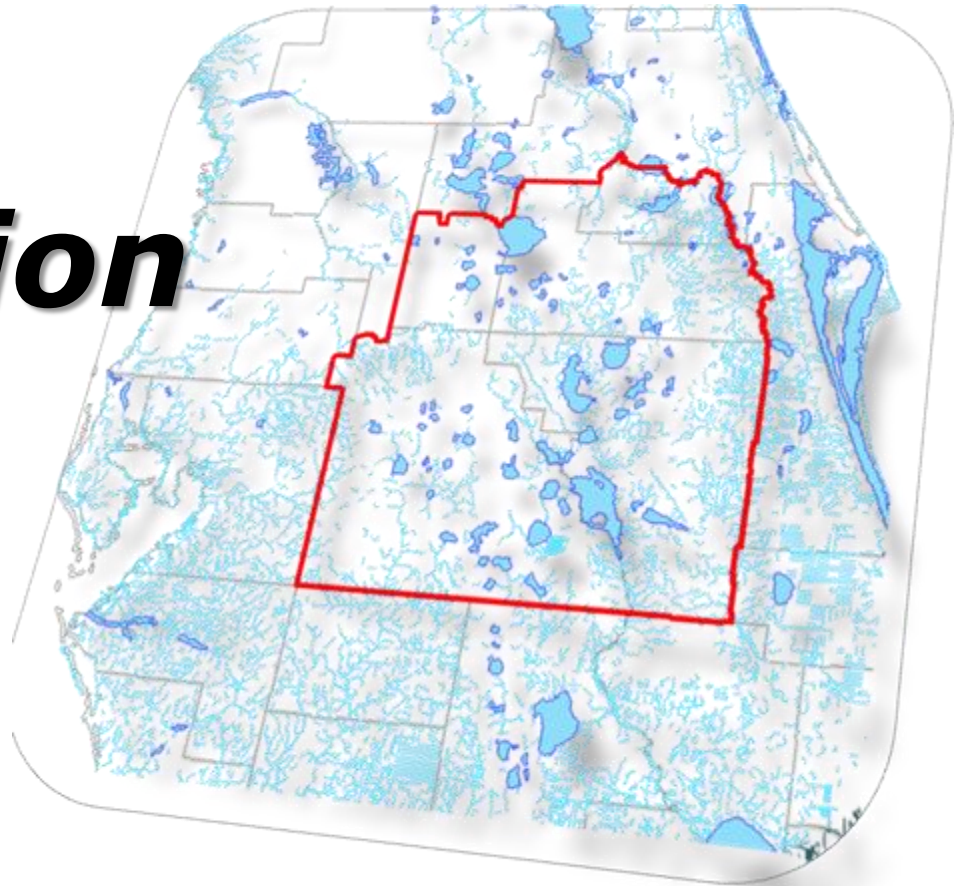
- August 2006 - Action Plan
Central Florida Coordination Area- CFCA
 - Significant increases in public water supply water demands; insufficient groundwater to satisfy without harm
 - Need to equitably distribute remaining water
 - Need to transition to alternative supplies for future demand
- 2008 - Interim Rules
 - Required that demands beyond 2013 be met by alternate water supplies (AWS)
 - Rules set to sunset on December 31, 2012
 - Interim rules to be replaced by a long-term solution

How Did We Get Here?

Phase II

- 2009
 - Attempts to replace interim CFCA rules
- September 2010
 - Unable to meet schedule resulting in stakeholder concern
- February 2011
 - New process / new name - CFWI
 - Expand participation and increase collaboration
 - Interim rules allowed to sunset
- April 2011
 - CFWI Steering Group initiated
 - “Full collaboration” with stakeholders
 - Ultimate objective: complete community engagement for regional partnerships (elected officials, business community, environmental interests, PWS, agriculture)
 - Sustainably meet future water demands

Organization



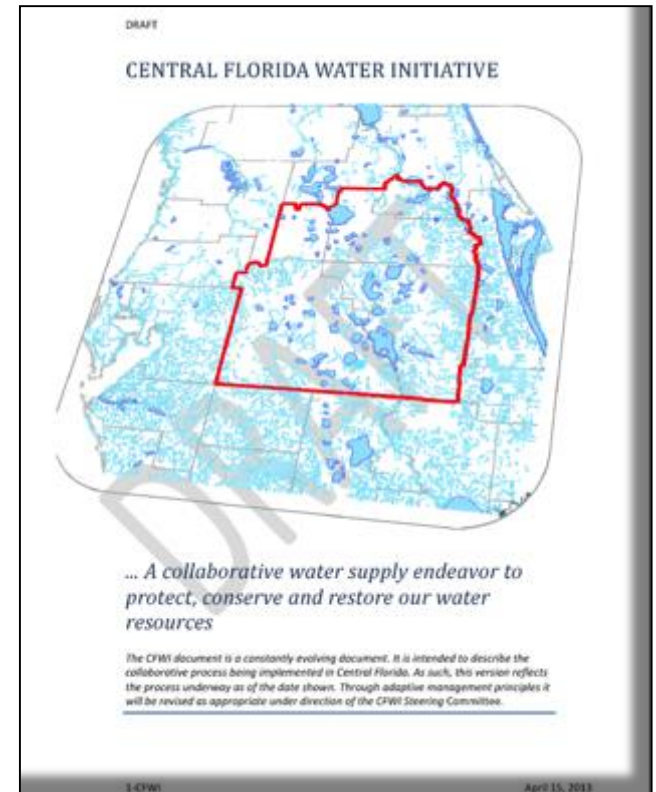
Drew Bartlett, P.E.

Director, Division of Environmental
Assessment and Restoration

Florida Department of Environmental Protection

Guidance Document Principles

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

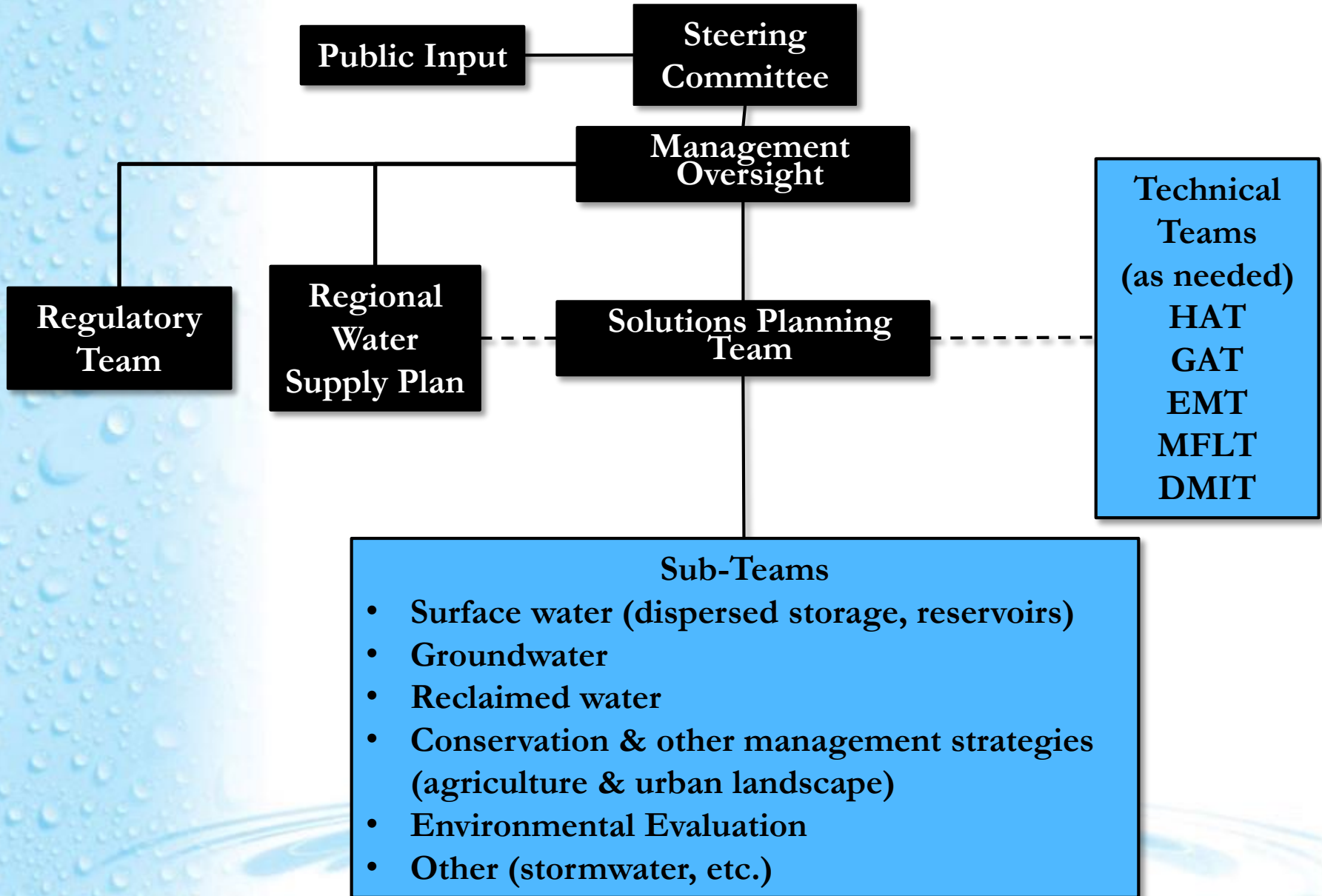


Guidance Document available at CFWIwater.com

CFWI Governance

- Steering Committee
 - One representative each from:
 - Utilities, St. Johns River, South Florida & Southwest Florida water management districts' Governing Boards (3), Florida Department of Environmental Protection and Florida Department of Agricultural & Consumer Services
- Management Oversight Committee
- Technical Oversight Committee
- Technical Teams (6)

Central Florida Water Initiative



Technical Teams

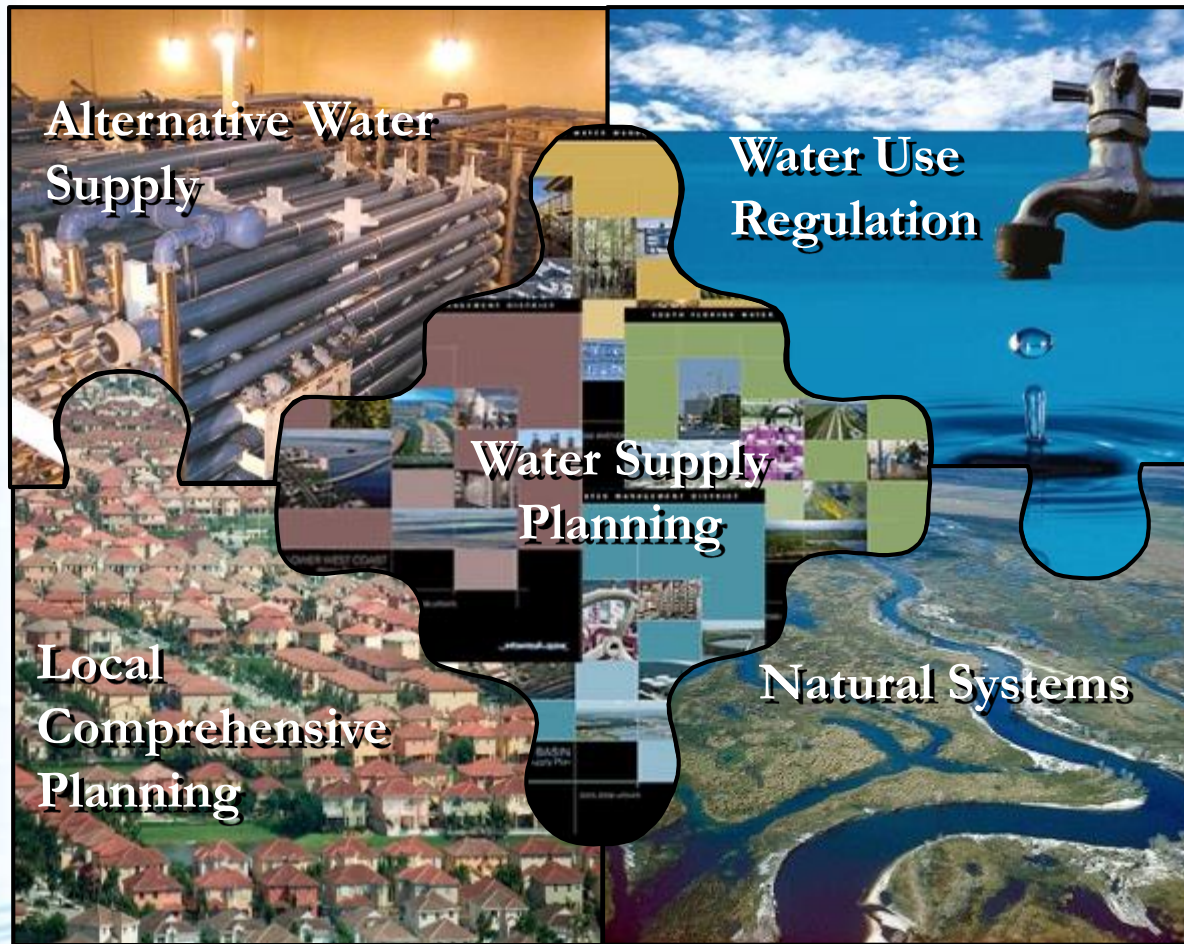
- Hydrologic Analysis (completed)
- Environmental Measures (completed)
- Minimum Flows and Levels (completed)
- Groundwater Availability (completed)
- Data, Monitoring & Investigations (completed)
- Regional Water Supply Planning
- Solutions Planning
- Regulatory

Collaboration

- Active membership in all workgroups across stakeholder groups
- Conference calls, web meetings, and periodic face-to-face meetings
- Over 200 participants across workgroups

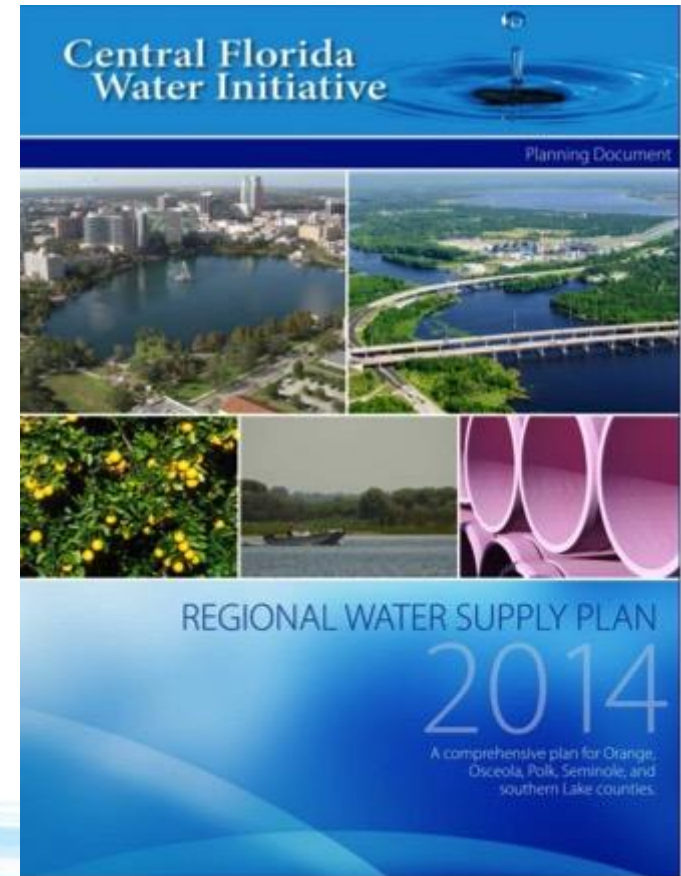


One Plan for CFWI Region



One Plan for CFWI Region

- Developing first-ever Regional Water Supply Plan
- Collaborative effort between Districts, FDEP, FDACS, utilities and other stakeholders
- Technical teams provided strong scientific foundation for development of Plan



Addressing the Challenges

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

Stakeholders



Public Involvement

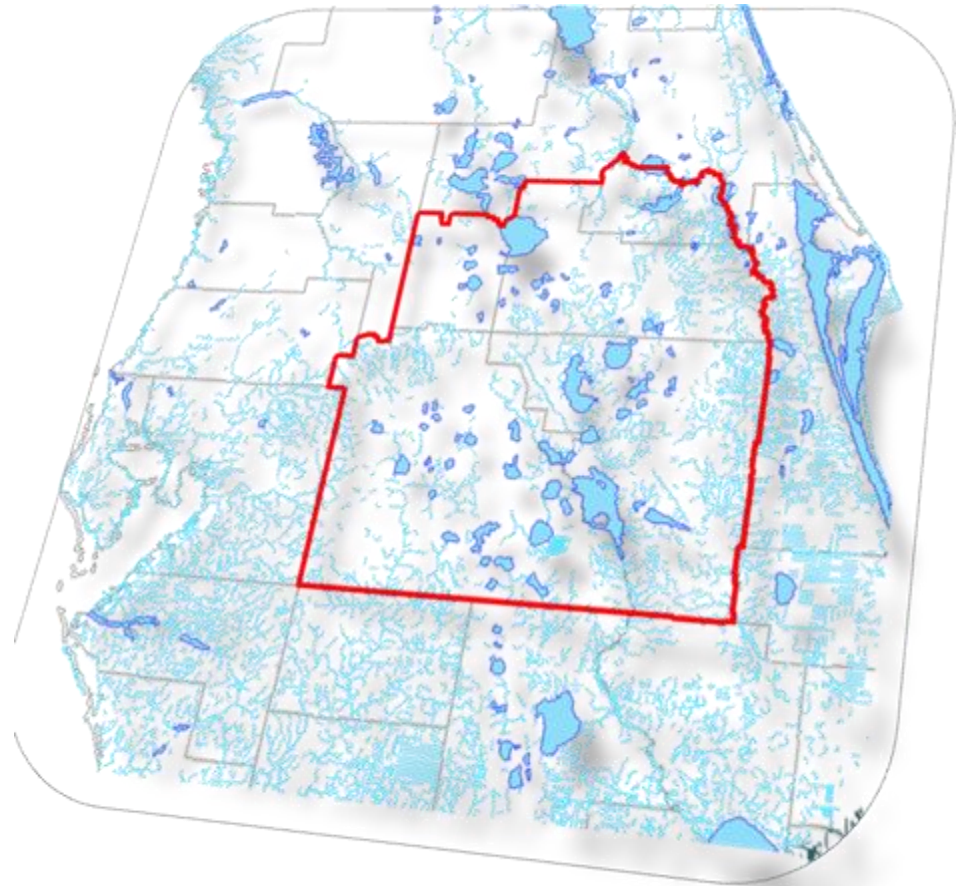
- Publicly noticed meetings/workshops
- Live webinar (recorded & on website)
- RWSP public comment period
 - 1,248 people submitted comments
- Ongoing outreach through business community, local government/utilities, independent organizations
- From June 2012 through April 2014, reached over 3,500 people through more than 120 presentations and briefings



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

Solutions



Robert Beltran, P.E.
Executive Director
Southwest Florida Water Management District

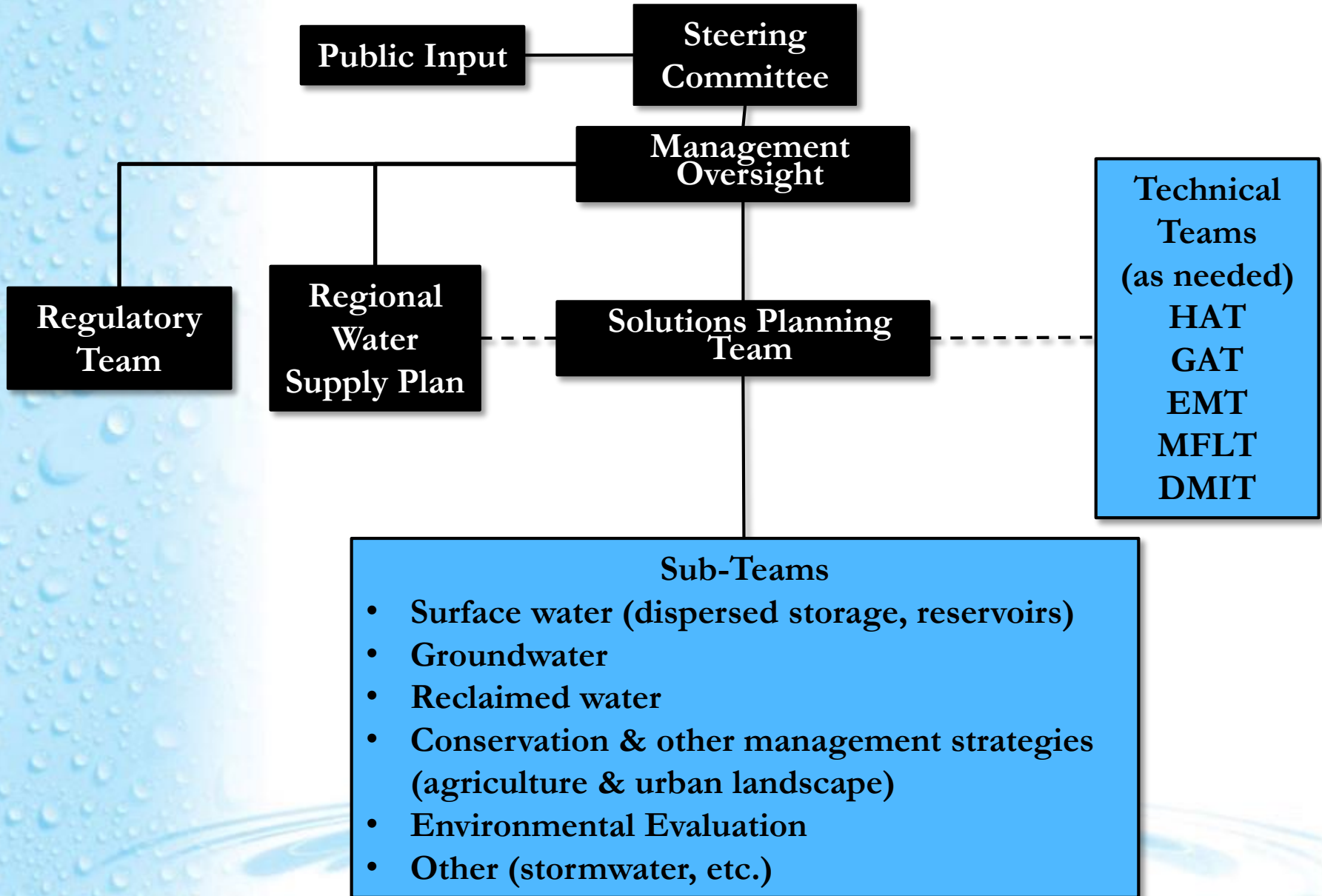
Next Phase: Solutions Team

- Develop strategies to meet future water demands by:
 - Optimizing use of existing groundwater and developing viable alternatives
 - Coordinating projects to maximize efficiencies
 - Encouraging strategic infrastructure planning and partnerships
 - Identifying conservation activities

Solutions Team

- Build on the CFWI RWSP
- Senior management staff from the FDEP, FDACS, and the South, Southwest, and St. Johns River WMDs, together with public water supply utilities, agricultural land owners, environmental groups, regional leaders and business representatives

Central Florida Water Initiative



Solutions Team Sub-teams

- Surface water (dispersed storage, reservoirs)
- Groundwater
- Reclaimed water
- Conservation & other management strategies (agriculture & urban landscape)
- Environmental Evaluation
- Other (stormwater, etc.)

Solutions Team Sub-teams

- Focus on regional, multi-jurisdictional project options
- Evaluate project costs
- Support partnerships, identify conjunctive use opportunities and maximize efficiencies
- Develop the CFWI Implementation Plan

CFWI Implementation Plan

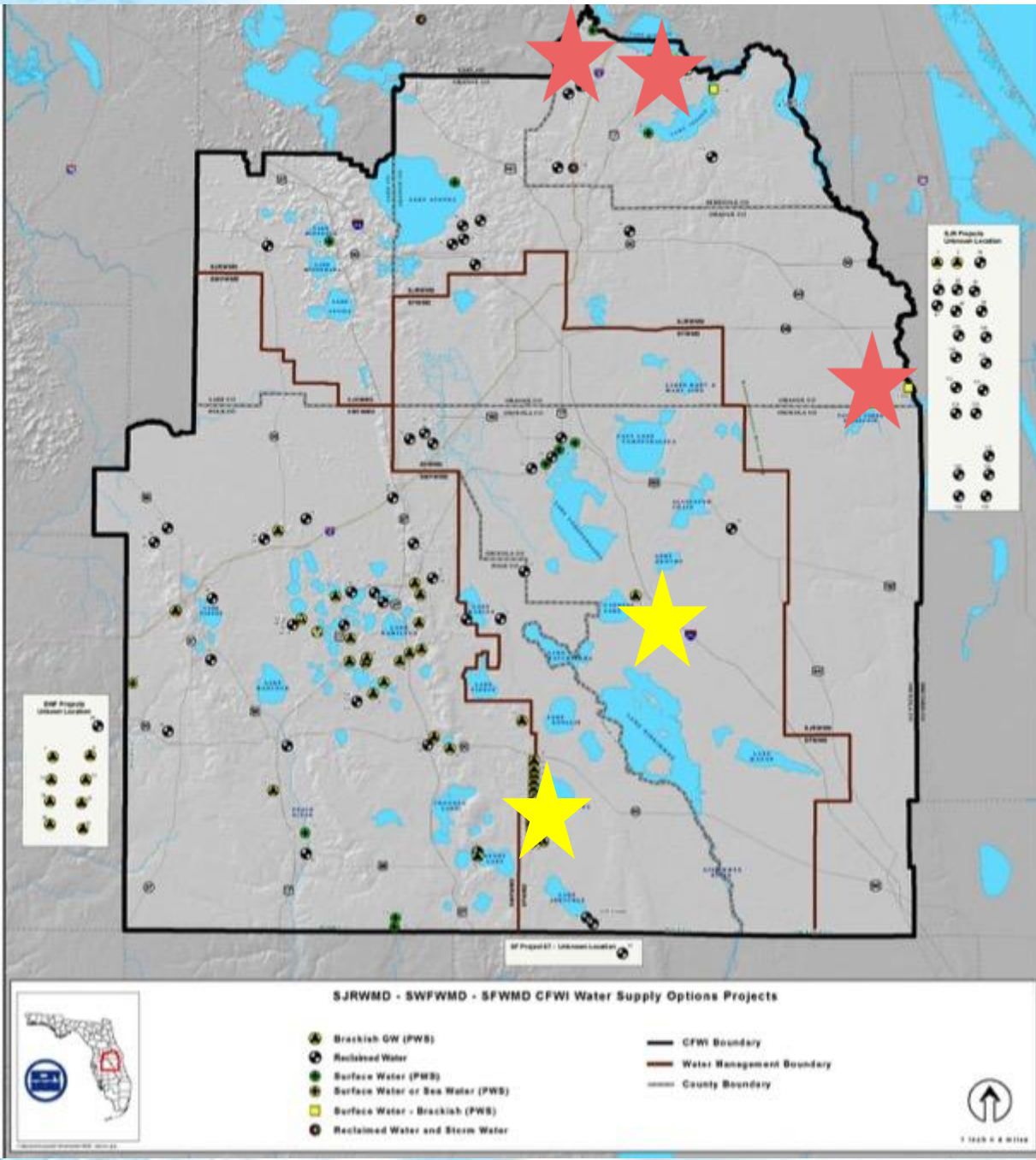
Further develop specific water supply projects through partnerships with water users including:

- Largest deficits/timing
- Source/project options
- Feasible/permittable
- Potential partnerships, governance structure
- Funding needs/sources
- Recovery/prevention needs
- Comprehensive monitoring/assessment
- Stakeholder outreach

Central Florida Water Initiative

Five Major Projects

1. St. Johns River at Yankee Lake, 50 mgd
2. St. Johns River at SR46, 55 mgd
3. St. Johns River at Taylor Creek Reservoir, 43 mgd
4. Brackish groundwater at Cypress Lake, 30 mgd
5. Lower Floridan at SE Wellfield, 30 mgd



2035 Water Resources Protection & Water Supply Strategies Document

1. Introduction
 - a. Goals
 - b. Public Outreach
2. Water Resource Assessment
3. Regional Water Supply Plan
4. Surface Water
5. Groundwater

2035 Water Resources Protection & Water Supply Strategies Document

6. Water Conservation
7. Reclaimed Water
8. Recovery/Prevention Projects
9. Stormwater, etc
10. Regulation Component
11. Financial Assessment
Component
12. Recommendations

Solutions Team Schedule

- Monthly meetings
 - Sub-team reports
 - Ad hoc meetings with stakeholders
- October 2014:
 - Sub-team draft chapters of the 2035 Water Resources Protection & Water Supply Strategies Plan due to Solutions Team
- December 2014:
 - Draft Plan to Steering Committee
 - Public Meeting
 - Solicit feedback/comments

Solutions Team Schedule

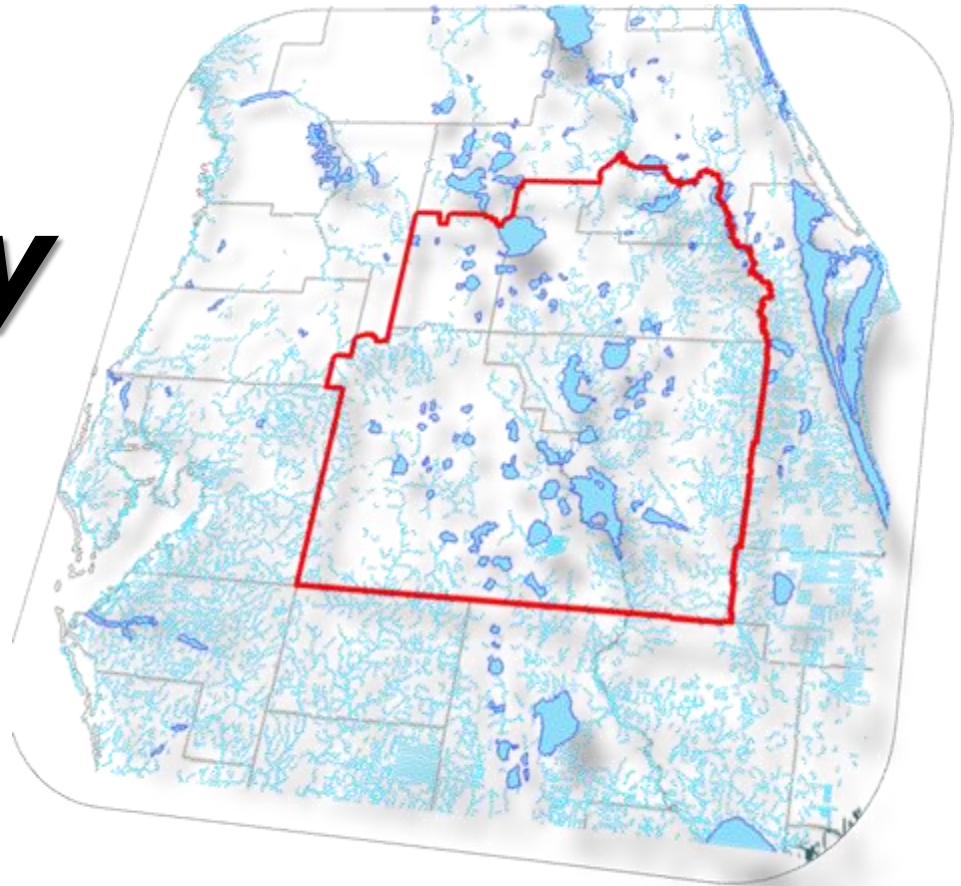
- February 2015:
 - Incorporate comments
 - Develop Final Draft
 - Public Meeting
- April 2015:
 - Final Draft Plan to Governing Boards
- Will work closely with the selected public involvement consultant to develop a communications plan and effectively engage all stakeholders

Future Path

- Build on the Final Draft Plan
- Develop a Solution Strategies Document to meet future water demands by:
 - Optimizing use of existing groundwater
 - Identifying conservation opportunities
 - Identifying viable alternative supplies
 - Options for consistent rules



Regulatory



Lennart J. Lindahl, P.E.

Assistant Executive Director

South Florida Water Management District

Goal

Guiding Principle three for the CFWI is to “establish consistent rules and regulations for the three water management district that meet the Collaborative Process Goals and implement the results of this Central Florida Water Initiative.”

Regulatory Team Objectives

- **Develop options for consistent regulations (including Legislative) to implement the solution strategies identified in the CFWI process.**
- **Assist with resource recovery strategies.**
- **Provide for equitable and predictable review of consumptive use permit applications among the districts.**

Path Forward

Building upon the planning process.

- Solutions Planning Team
 - Meeting future water supply demands
 - Resource protection
- Regulatory Team
 - Consistent rules and regulations
 - Balance public interest, permitted user rights, and sustainability of water resources

Regulatory Team

■ Objectives

- Report consumptive use data
- Regulatory and statutory options
- Develop sustainability, demands, and strategy options
- Review management activities
- Regulatory alignment options
- Implementation consistency
- Report findings
- Reasonable-beneficial demand options

Regulatory Team

- Scope of Work
 - Develop sustainability, demands, and strategy options
 - Regulatory alignment options



Regulatory Team

■ Scope of Work

- Regulatory and statutory options to support Solutions Planning
- Review management activities
- Implementation consistency
- Reasonable-beneficial demand options



Regulatory Team

Interim Steps

- Per FDEP Memo (12/13/13), coordinated process for:
 - Application decisions
 - Conservation
 - Permit duration
 - Limiting conditions added to all CUPs issued



Regulatory Team

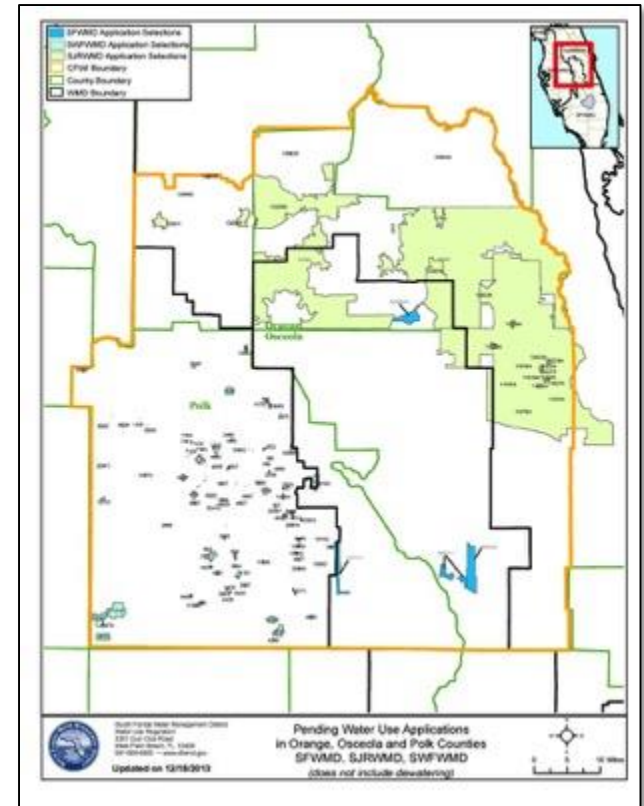
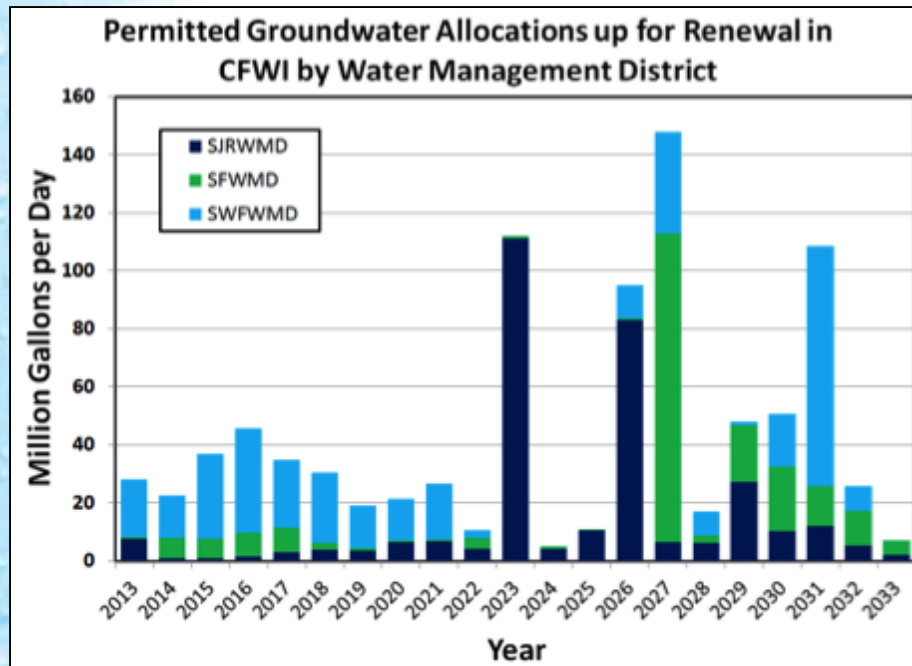
Develop Common Language

- Field visit



Regulatory Team

Reporting consumptive use data



Regulatory Team

Review of management activities

- Delivered to the Groundwater Subteam for modeling scenarios and data analysis:
 - Reclaimed water projects
 - Wellfield operational plans
 - Mitigation



Regulatory Team

Menu of Conservation Measures

- Delivered to conservation sub-team
- Options for consideration in future planning activities

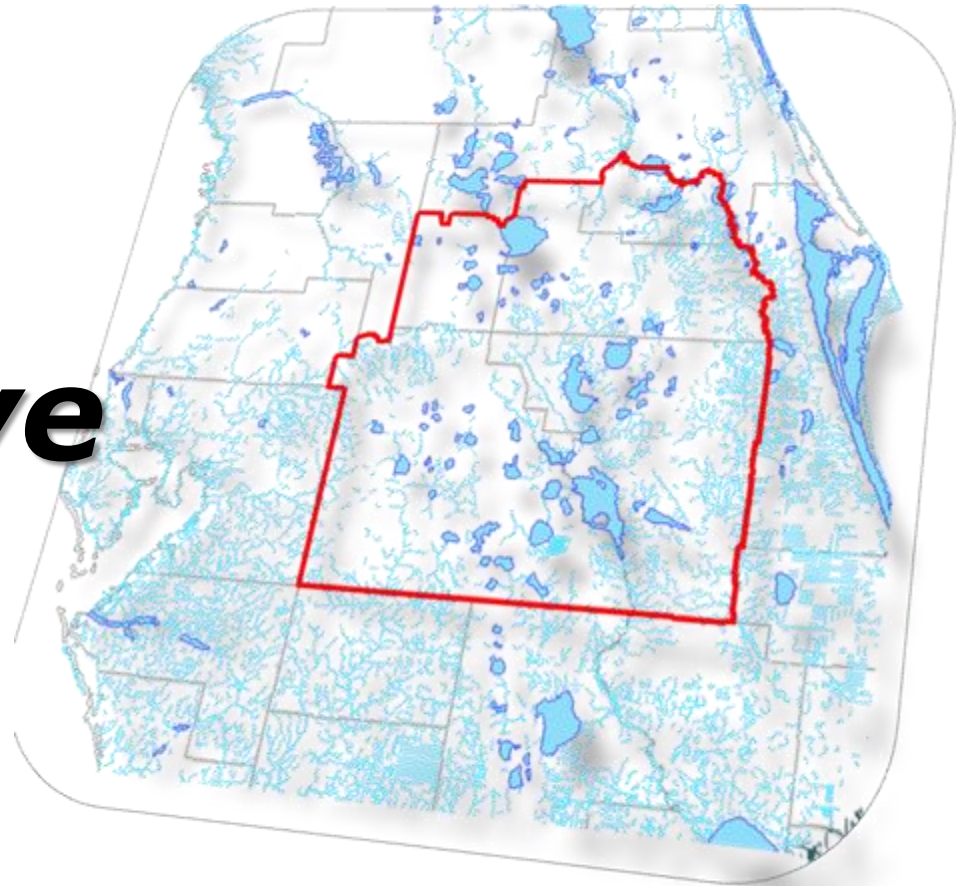


Regulatory Team

Working with Solutions Team to provide input on:

- Water use per capita
- Water shortage criteria comparison
- Aquifer recharge and impact offset sources and programs
- Resource redistribution
- Caution area example review
- Interdistrict transfer of ground and / or surface water
- Public interest (3rd prong test interpretation)

User Perspective



Eric Olsen
Attorney
Hopping Green & Sams, P.A.

Land Development & Water Supply

Local comp plan and RWSP statutory links:

- §163.3167(9) – comp plans must address adequate water supply for existing and projected use considering WMD RWSP
- §163.3177(4)(a) – comp plan must coordinate with WMD RWSP
- §163.3177(6)(c)3 – potable water element must incorporate traditional & alternative water supply projects from WMD RWSP to meet needs for at least 10 years with facilities work plan
- §163.3177(6)(c)3 – local gov's water supply work plan must update every 5 years 18 months after WMD approves RWSP. Submitted to DEO for review.
- §163.3180(2), – adequate water supplies and facilities in place to serve new development by certificate of occupancy or equivalent

CFWI Draft RWSP

■ Key water demand points:

- Population projected increase 49% from 2.7 million in 2010 to 4.1 million in 2035
- Public supply water demand projected increase 50% from 435 mgd in 2010 to 653 mgd in 2035
- Agriculture water use projected increase 16% to 215 mgd in 2035
- Power generation, mining, industrial/commercial projected to increase
- Total water demands projected increase from 800 mgd to 1,100 mgd in 2035



CFWI Draft RWSP

■ Conclusions:

- Limited opportunities for additional fresh groundwater withdrawals
- Conservation - 42 mgd potential (64% from public water supply & 26% from agriculture)
- AWS - 139 project options providing up to 391 mgd of additional water supply
- AWS project options - reclaimed water, water storage, brackish groundwater, surface water, desalinated seawater
- AWS project options - total estimated cost = \$1.8 - 2.3 billion

CFWI – Possible Impacts on Land Development?

- Incorporating RWSP AWS into local gov. comp plans?
- More expensive water sources for new growth?
- Who pays?
- Higher impact fees or utility charges?
- Higher conservation standards in comp plans or local development regs?
- More time needed for local government utility cooperation to jointly develop and fund AWS projects?
- Will AWS projects be in place to support new growth or development?

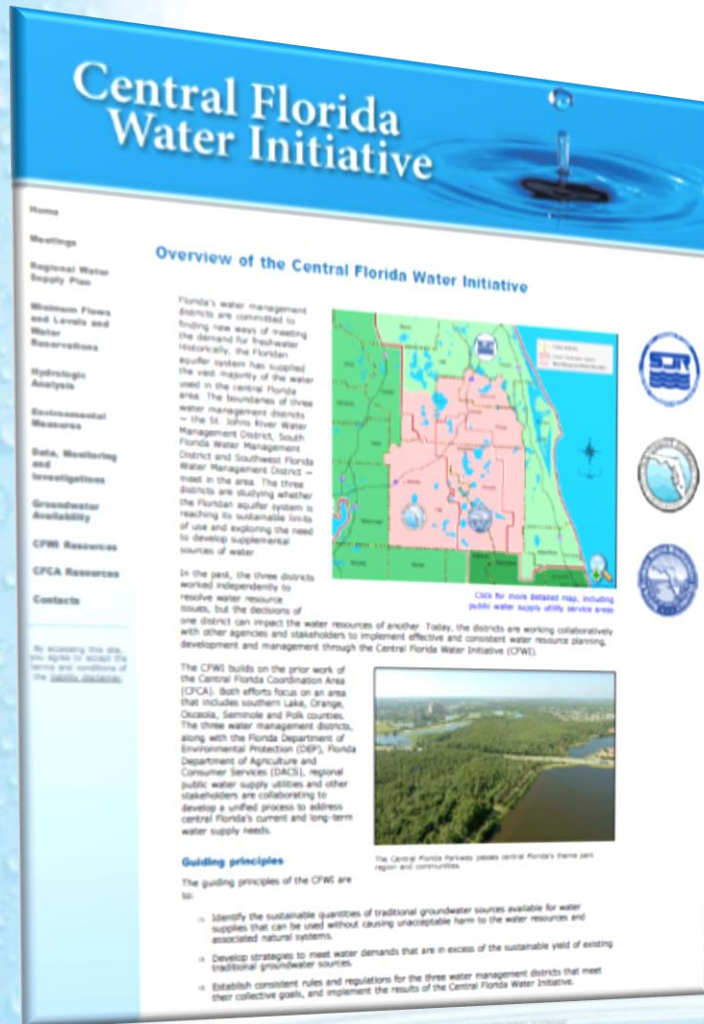
Self Suppliers

- New ag production – more crops on less land with irrigation
- Where does new and existing agriculture in CFWI obtain water?
- Current focus – increased conservation & efficiency



Self Suppliers

- Definition – obtain their own water (*i.e.* not from utilities).
- Examples: power plants, bottled water, mining, manufacturing, golf courses, water recreation.
- Role in CFWI?
- Alternative water sources?
- Self-planning.



Additional
information
can be found at
cfwiwater.com

Thank you.