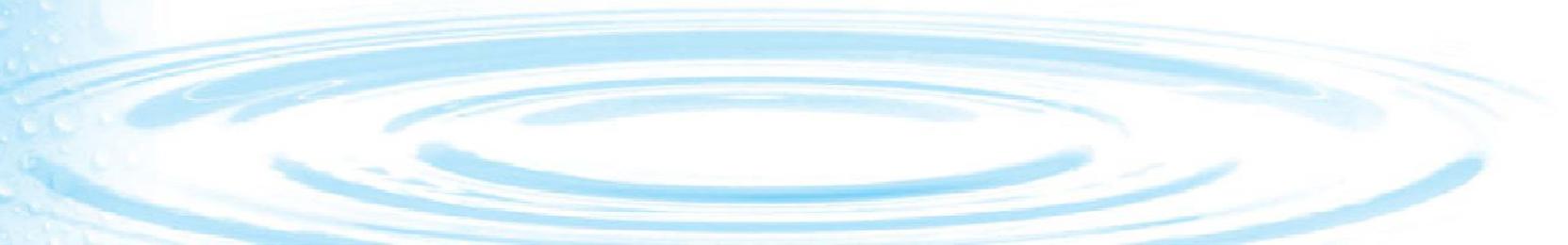
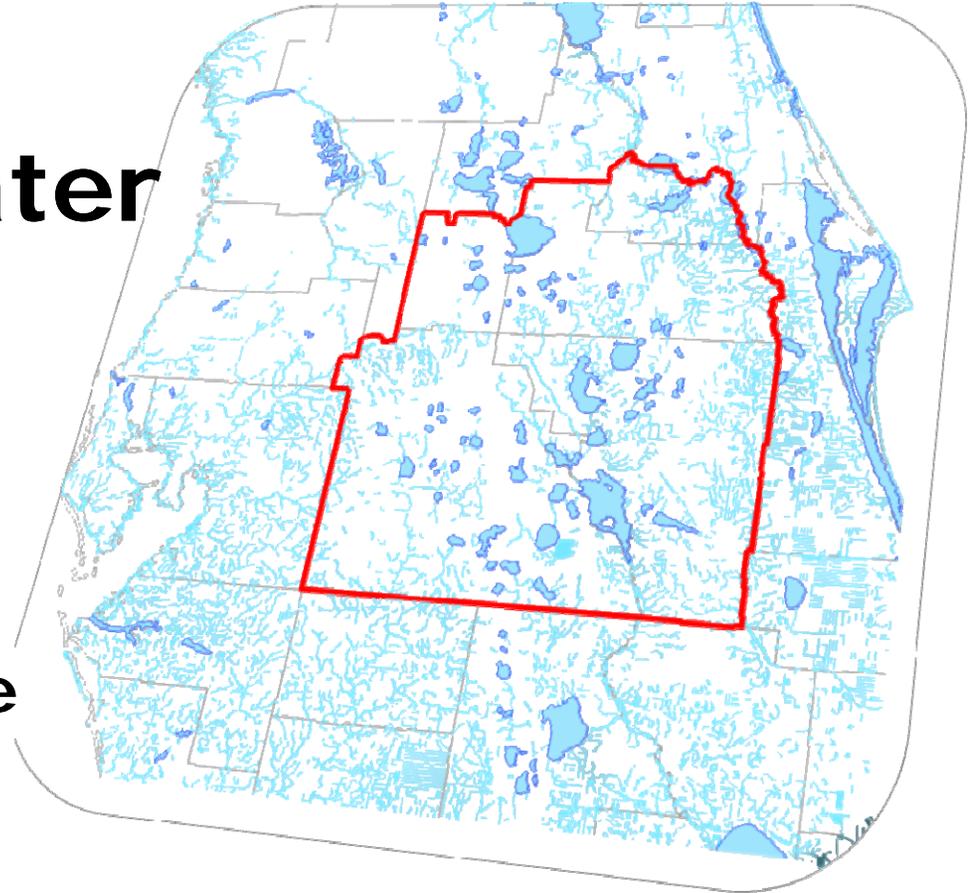


# CFWI Regional Water Supply Plan

**Steering Committee**  
**Tom Bartol, P.E.**  
December 13, 2013



# 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



# Plan Structure

- [Executive Summary](#)
- [List of Tables](#)
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- Chapter 10: [Conclusion](#)
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# Chapter 1 - Introduction

- Statutory & Legal Framework
- Goals / Principles
- Description of CFWI Area
- Previous Planning Efforts
- Water Resources of CFWI Area

# Chapter 2 – Population and Water Demands

- Population by County 2010-2035
  - Public Supply (PS) and Domestic Self-Supply (DSS)
- Demand by County 2010-2035
  - PS
  - DSS
  - Agriculture
  - Commercial / Industrial / Institutional & Mining Dewatering
  - Landscape / Recreational / Aesthetic
  - Power Generation
- Methods
- Considerations

## Chapter 3 – Resource Protection and Assessment Criteria

- Regulatory Protection
  - Consumptive Use Permitting
  - Minimum Flows & Levels (MFLs)
  - Water Reservations
  - Water Shortage
- Resource Protection
  - Environmental Considerations
    - MFL Prevention & Recovery Strategies
  - Climate Change

## Chapter 4 – Evaluation of Water Resources

- East Central Florida Groundwater Flow Model Overview and Simulations
- Evaluations / Results
  - Groundwater Availability
  - MFLs Status
  - Non-MFL Lakes, Wetlands & Springs Status
  - Water Quality & Saltwater Intrusion

# Chapter 5 - Water Conservation

- Conservation estimates for all water use categories
  - Conserve Florida EZ Guide & Methods
- Water Conservation Programs

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
<b>Total</b>	<b>42</b>

# Chapter 6 – Water Source Options

- Groundwater
  - Overview of Aquifers
  - Brackish/Non-traditional Groundwater
- Surface Water
  - Overview of River Systems
- Seawater
- Reclaimed Water
- Aquifer Storage and Recovery (ASR) & Reservoirs

# Chapter 7 –Water Supply Development

- Project Options
  - Brackish/non-traditional Groundwater (35 projects)
  - Surface Water (14 projects)
  - Seawater (1 project)
  - Reclaimed Water (86 projects)
  - Storage Capacity
  - Management Strategies (3 projects)
- Permitting / Planning Link
- Political Boundaries

# Water Supply Project Options

County	Reclaimed Water	Brackish/ NT GW	Surface Water	Management Strategies	Total
Orange	69	10	47	0	<b>126</b>
Osceola	34	17	4 - 29	0	<b>55 - 80</b>
Polk	30	18 - 48	15	6	<b>69 - 99</b>
Lake (southern)	7	0	5	0	<b>12</b>
Seminole	25	0	92	0	<b>117</b>
<b>Total</b>	<b>165</b>	<b>45 - 75</b>	<b>163 - 188</b>	<b>6</b>	<b>379 - 434</b>

Million gallons per day

# Chapter 8 – Water Resource Development

- Project Options
  - Research Activities
    - Surface and Groundwater Modeling
  - Water Conservation Programs
  - Agricultural Projects
    - Facilitating Agricultural Resource Management Systems Program (FARMS)
  - Hydrologic Data Collection / Analysis
  - Lower Floridan Investigations
  - MFL & Reservation Management Activities
  - MFL Recovery / Prevention Strategy Projects
  - Abandoned Well Plugging
  - Surface Water Storage / Treatment Research Projects
  - Aquifer Recharge Projects
  - ASR Research & Pilot Projects

# Chapter 9 –Funding for Water Supply and Water Resource Development

- Water Utility Revenue Funding Sources
- Water Management District Funding Options
- State Funding Options
- Federal Funding Options
- Public-Private Partnerships, Cooperatives, and Other Private Investment

# Chapter 10 – Conclusion

- Groundwater Availability – 50 mgd
  - 250 mgd deficit
- Water Conservation Potential
  - 42 mgd
- Alternative Sources Potential
  - 391 mgd (435 with RW Supplementation)
- MFLs
  - 46 in CFWI
  - 10 currently below
  - 15 projected below

# Chapter 11 – Recommendations / Future Direction

Actions for implementation & future direction for:

- Water conservation
- Groundwater
- Reclaimed Water
- Surface Water
- Seawater
- New Storage Capacity
- Minimum flows and levels and Water Reservations
- Water supply development projects
- Water resource development projects
- Consumptive use permitting process
- Intergovernmental, water supplier, and public coordination
- Demand estimates and projections
- Climate Change

# Public Involvement Schedule

<b>Components</b>	<b>Time Frame</b>
<b>Briefings/Presentations</b>	Ongoing
<b>Live Webinar</b> Recorded & made available (Polk)	Aug. 29, 2013 1:30 p.m.
<b>Public Status Update Workshop</b> Winter Park Civic Center (Orange)	Sept. 26, 2013 4–7 p.m.
<b>Technical Methods Workshop</b> Osceola Heritage Park (Osceola)	Nov. 7, 2013 10 a.m.– noon
<b>Draft RWSP Workshop</b> Clermont Community Center (Lake)	Dec. 12, 2013 4–7 p.m.
<b>Draft RWSP to WMD Governing Bds.</b> SJR: Dec. 10; SF: Dec. 12; SWF: Dec.17	Dec. 2013

# RWSP Next Steps

- Draft Plan Available – November 26, 2013
  - 45-day comment period
  - Ends January 10, 2014
- Develop comment responses and a response document
- Final Plan

## 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, Osakola, 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 (DACS), 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:

- 1) 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.
- 2) Develop strategies to meet water demands that are in excess of the sustainable yield of existing traditional groundwater sources.
- 3) 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?

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