

# Creating a Regional Water Civic Architecture for Central Florida

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## Recommendations



October 14, 2011  
DRAFT COPY

**The Congress of Regional Leaders  
approved the Recommendations on  
November 4, 2011**



## About this report

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To: *The Congress of Regional Leaders*

A little less than a year ago, the Urban Land Institute - Central Florida and *myregion.org* presented you with a white paper detailing the pending crisis in Central Florida's current water supply, and a strategy for achieving sustainability. Let's call that the "What."

Since then, we have been focused on the civic architecture or governance structure required to achieve the "What." Call it the "How." This white paper completes our three-year study of water resources in support of a long-range focus by regional leaders on "How Shall We Grow?"

At the conclusion of the first phase of this project, we reported that the current water supply is insufficient to meet Central Florida's needs and would likely become an issue as early as 2013. Economic conditions have slowed down the region's growth, pushing that projection further into the future – by some accounts to 2018 – but change is still necessary. Alternative water sources, though available, are more costly and will require a significant investment in infrastructure. We also reported it will take seven to 10 years to develop that infrastructure and that conservation measures alone will not be sufficient to achieve sustainability.

The challenge, explored in this white paper, becomes how Central Florida's seven counties, 86 municipalities and three water management districts can equitably apportion their water and financial resources to provide for the continued economic growth of the entire region, and avoid litigation that would cost taxpayers millions of dollars without producing a single drop of additional water.

Challenges addressed in this white paper include:

1. How can the region rise above political boundaries and find a way to approach future water use as a cohesive team?
2. What political infrastructure would be required to make this happen?
3. Who would oversee the effort?

These are not easy questions. Most regional water authorities have been born of legal battles and legislative mandates. We have an opportunity to change that, but it will require the political will to change, a willingness to work together across jurisdictions for the greater good, and the courage to uphold and defend those changes through any challenges that might arise.

*The Congress of Regional Leaders* is, in itself, a giant step in the right direction. And by asking "How Shall We Grow?" together, you have already taken the next step down the road toward regional cooperation. In this report, we have endeavored to provide you with the collective wisdom and experience of those who have gone before, as well as a reasonable analysis of any likely hurdles unique to the Central Florida region. As with the previous white paper, I hope you will read this report and use it as a ready reference as you work together to prepare for our common future and as you continue to ask yourselves, "How Shall We Grow?"

Sincerely,  
**Jim Sellen**  
Vice Chair  
ULI Central Florida



## About the Urban Land Institute

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The mission of the Urban Land Institute (ULI) is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.

Founded in 1936, ULI has approximately 30,000 members worldwide, representing the entire spectrum of land use and real estate development disciplines, working in private enterprise and public service. ULI is committed to:

- **Bringing leaders together**
- **Fostering collaboration**
- **Exploring land use and development issues**
- **Advancing policies and practices**
- **Sharing knowledge**
- **Creating a global network with local impact**

## About ULI Central Florida

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ULI Central Florida is ULI at the local level. Through District Council–sponsored educational forums and events, ULI Central Florida offers an unbiased, nonpartisan, and open exchange of ideas impacting land use and the quality of life in Central Florida.

Chair: **Cecelia Bonifay**  
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[CentralFlorida.uli.org](http://CentralFlorida.uli.org)

## About *myregion.org*

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Established in 1999 and led by a group of public, private and civic leaders, *myregion.org* is encouraging unprecedented regional cooperation among community leaders to create a coordinated, comprehensive plan for Central Florida's future. By creating a shared 50-year vision for the region, *myregion.org* and its community partners are ensuring Central Florida's place in the global economy and improving opportunities for generations to come. *Myregion.org* is one of four lines of business of the Central Florida Partnership.

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# Acknowledgments

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The “Creating a Regional Water Strategy” project is prepared on behalf of the *Central Florida Congress of Regional Leaders*, which serves as the regional organization of elected officials who will help encourage implementation of the Central Florida Regional Growth Vision by developing common policies and practices around the six Regional Principles of Growth adopted in the Regional Vision.

The *Congress of Regional Leaders* includes 16 elected officials representing city and county governments and the school boards of the seven Central Florida counties (Brevard, Lake, Orange, Osceola, Polk, Seminole, and Volusia).

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## Executive Summary

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In times of crisis, people come together. They put aside their differences and rely on each other to do the right thing, instilling trust in one another because they have no alternative. They can't stop and focus on issues that divide – issues like money, territory and credit for getting something done. They just press forward.

What happens, then, when the crisis looms on the horizon, not yet visible? Sadly, very little.

That's the state Central Florida finds itself in today with its supply of water for residents, businesses, governments, agricultural operations, and industry. The seas appear to be calm at the moment, but a potential crisis awaits just beneath the surface.

Current sources of clean, affordable and high-quality water are not sufficient to meet the future demands of the region, according to a 2008 study by the St. Johns River, South Florida and Southwest Florida water management districts, which all oversee water use in parts of Central Florida.

That means in just a few years – as early as 2018, by some estimates – parts of the region will be forced to pull water from sources they aren't using now. And those alternative water supplies will be costly.

The questions become, then, how do the people leading the region's seven counties, 86 municipalities, and three water management districts – all with different philosophies and policies on water supply planning – work together to avoid the turf wars that have led to costly litigation? What kind of “civic architecture” or governance structure needs to be put in place to manage the water supply and its costs?

Some local officials believe they have sufficient water supply for the short term, but they may not have the money to continue upgrading their infrastructure for storage and distribution. Other counties have healthy tax bases because they continue to grow, but they're watching their water supply carefully, knowing their inexpensive sources could run dry sooner than they think. If only the two could come to an agreement, they might solve each other's problems. But that's a big “if only.” One point is clear: No local government can address its water supply needs without cooperating and collaborating across local, regional and state jurisdictions. To explore this issue, the *Congress of Regional Leaders* – an organization of elected officials representing city and county governments and the school boards of Brevard, Lake, Orange, Osceola, Polk, Seminole and Volusia counties – retained Urban Land Institute Central Florida and *myregion.org* to develop a regional water strategy.

The project's mission is to work with stakeholders, build consensus and come up with recommendations that will assist Central Florida's elected officials and other decision-makers in planning and implementing region-wide strategies that are equitable and

mutually beneficial. The project also aims to increase awareness of Central Florida's water challenges and build alliances across regional boundaries to help pave the way for change.

The project is being conducted in two phases. The first focused on Central Florida's water supply, demand and conservation. The second, which is the subject of this white paper, explores how to regionally address these challenges and avoid two kinds of crises: one that involves a lack of inexpensive water, and the other that involves a lack of cooperation.

## History

In 2006 and 2007, *myregion.org* and nine partner organizations asked more than 20,000 Central Floridians the question, "How Shall We Grow?" Through a series of "community conversations" looking at four possible development scenarios, the message was clear: Development trends threatened Central Florida's livability, environmental quality and competitive standing.

Participants embraced a different future focused on "4 Cs" – conservation, countryside, centers and corridors; a future in which Central Florida consumes less land, preserves more precious environmental resources, creates more distinctive places to live, and provides more choices for how people travel. A critical issue emerged: How do we meet the water needs of future growth while protecting the environment?

### Central Florida Coordination Area/ Central Florida Water Initiative

In 2007, the St. Johns River, South Florida and Southwest Florida water management districts concluded that sustainable quantities of groundwater in central Florida were insufficient to meet all future public water supply demands and that there was an immediate need to develop and implement supplemental water supply projects.

To address these issues, the three water management districts individually implemented interim rules limiting withdrawals of groundwater to meet 2013 demands. Water demands after 2013 would require alternative water supplies. The interim rules sunset at the end of 2012. During the period between 2007 and 2012, the water management districts were to develop an assessment of the available groundwater relative to current demands and propose new water use permitting rules in accordance with that assessment.

The CFCA includes: Seminole, Orange and Osceola counties, and south Lake County within the St. Johns River Water Management District; Orange, Osceola and Polk counties within the South Florida Water Management District; and Polk County within the Southwest Florida Water Management District.

The CFCA effort has transitioned into the Central Florida Water Initiative, a collaboration involving the three water management districts, the Florida Department of Environmental Protection, the Florida Department of Agriculture and Consumer Services, and the major public water suppliers in Central Florida. The CFWI effort involves the parties working collaboratively to develop the technical knowledge base for evaluating groundwater availability, assess potential environmental impacts associated with withdrawals, and then develop policies and rules to govern the use of the remaining groundwater while protecting the environment.

Separately, in 2008, the three water management districts' governing water use in the region – St. Johns River, Southwest Florida and South Florida – issued a joint statement for the Central Florida Coordination Area (CFCA) that sustainable quantities of groundwater were insufficient to meet additional water demands beyond 2013 and that aggressive conservation, use of reclaimed water, and development of alternative water supplies were essential.

With the limitations on groundwater supply forecast after 2013 and the high potential for conflict over the remaining supply, the *Congress of Regional Leaders* made water its top priority and adopted two overarching goals:

- 1. Create a regional water strategy for Central Florida**
- 2. Avoid the use of any public money to litigate over water.**

In early 2009, the *Congress of Regional Leaders* unanimously agreed to retain ULI Central Florida and *myregion.org* to address these goals through a two-phase process. The first phase would identify the challenges Central Florida faces in ensuring enough clean, inexpensive drinking water for the future. The second would address how to fairly divide water from all available resources – and share the costs of processing it – among the region's numerous political entities in a way that would avoid costly litigation.

## **Phase I**

In July 2009, *myregion.org* and ULI Central Florida assembled a Steering Committee of public and private-sector subject matter experts from Brevard, Lake, Orange, Osceola, Polk, Seminole and Volusia counties.

The committee conducted a series of stakeholder meetings in each of those counties between September 2009 and January 2010 to identify both common concerns and jurisdictional differences. Thousands of citizens voiced their opinions. While specific issues varied by county, a strong consensus emerged.

In July 2010, ULI Central Florida and *myregion.org* convened a blue-ribbon panel of water experts from around the country to share best practices and work with regional water leaders to draft recommendations to present to the *Congress of Regional Leaders*.

The information gleaned from the stakeholder meetings was compiled in a briefing book and used as a basis for discussion for this regional water strategy workshop and panel.

In August 2010, the group convened again for a half-day to polish its recommendations, which were the subject of the white paper **Creating a Sustainable Water Supply for Central Florida: A Regional Strategy**. The bottom line:

- 1) Water is undervalued.
- 2) Water users will not be able to use groundwater from the Floridan aquifer to supply all future needs without causing unacceptable environmental impacts.

- 3) Conservation must be an essential part of any regional water use strategy.
- 4) Alternative water sources are available, but at a much higher cost. Tapping them economically will require a substantial investment and a coordinated regional effort.

Phase I identified the challenges ahead: How to reduce consumption to keep water demand within the capacity of our lowest-cost water resources, while building the infrastructure required to sustain us in the future; and how to accomplish this without placing an undue financial burden on utilities.

The report was accepted on December 10, 2010 by the *Congress of Regional Leaders*, which is working to implement strategies across the region.

## **Phase II**

In August 2011, *myregion.org* and ULI Central Florida convened a Technical Assistance Panel of public and private-sector local, state and national subject matter experts. Their task: Explore how the region can rise above political boundaries and find a way to approach future water use as a cohesive team. What kinds of political infrastructure would have to be put in place to make this happen? Who would oversee the effort? How would every county, municipality, water distributor and other stakeholder be brought into the project and have a voice?

The panel met for two days in downtown Orlando. The first day's agenda focused on how cooperative water-sharing efforts have worked and what challenges they faced. The panel heard from some programs that were considered successes and some that fell apart because of in-fighting or lack of cooperation.

Based on the collective experience of the panel, as well as the presentations and the background information ULI provided in advance, the experts came up with a set of recommendations, which is the subject of this white paper.

## **Problem Statement**

To ensure all stakeholders work as a region to address future water supply, the project's Steering Committee established this problem statement at the outset of Phase II:

*Today, Central Florida is made up of a collection of seven counties and 86 cities, some of which will experience growth beyond that which can be sustained by traditional water resources.*

*As documented in the *Creating a Sustainable Water Supply for Central Florida: A Regional Strategy* white paper, it is essential that the water utilities serving the region, in cooperation with the water management districts, continue to plan together to develop the water conservation, supply programs, and*

*associated infrastructure necessary to provide a sustainable water supply, and balance this with current sources.*

*The challenge we face is how to facilitate the formation of the multi-jurisdictional entities needed to ensure the future planning, construction and operation of alternative water supply programs and projects to meet future water supply needs.*

## Summary

What is the secret to ensuring collaboration among all of the entities that have a stake in Central Florida's future water use? Perhaps it's providing everyone with a clear picture of what could happen without a regional spirit of cooperation.

Instead of looking at the challenge as territorial, the *Congress of Regional Leaders* has taken the wise approach of considering the issue in a more cohesive way. After all, water itself knows no political boundaries. Humans are assigning it to districts and jurisdictions. Only humans can unassign it and see water as a resource to be conserved, managed and shared.

It will take a concerted effort among all involved to make any plan work, with these key principles agreed upon during the Phase II research:

- Everyone needs water.
- Divided equitably does not always mean shared equally.
- A regional effort should focus on the apportionment of costs, not just water.
- Sometimes voluntary participation works better than required involvement.
- Collaborative efforts should be based on specific projects, not on connecting specific organizations around all projects.
- Trust is often the top issue that erodes partnerships in collaborative projects.
- It shouldn't take a crisis to create a regional water strategy.

Central Florida leaders should use these principles to develop a long-term regional water supply solution.



# Background

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## Central Florida Overview

There are more than 1,400 active public water supply providers in the seven-county Central Florida region. These range from large public utilities such as Orlando Utilities Commission (OUC) with a 2013 permitted allocation of 109.20 mgd to private utilities serving individual residential subdivisions. Approximately 250 providers have permitted allocation of more than one million 1 mgd. (See Page 8 for a map of service areas of the largest providers.)

With such a large group of providers, cooperation among local governments is essential for ensuring the region has enough clean, inexpensive water to sustain today's needs and forging ahead with plans for developing alternative water supply facilities that will be needed to meet future demands.

In Central Florida, local governments have primarily been responsible for providing public water supply. But many problems that have developed are regional in nature, making local resolution of conflicts difficult, if not impossible. Funding alternative water supply infrastructure that involves more than one local government is a huge challenge. This issue becomes even more complicated when more than one water management district is involved.

Sharing water is not always an easy answer. Florida law provides for long-distance transfer of water across hydrologic boundaries, but also stipulates that when water is transferred, it must not diminish availability of water for present and future needs of the sending area. The receiving area must have exhausted all "reasonable" local sources and options. An unintended consequence of this policy is that localities think they own their water and must prevent access by other localities.

### Regional Snapshot

#### **Jurisdictions:**

- 7 counties: Brevard, Lake, Orange, Osceola, Polk, Seminole and Volusia
- 86 cities

#### **Population:**

- 3.7 million

#### **Economics:**

- \$147 billion in gross regional product (2009)
- 45th largest in world
- 18th largest in the U.S.

#### **Education:**

- One-fourth of residents hold bachelor's degree or higher
- 81% high school graduation rate

#### **Growth:**

- Total population expected to grow 91% by 2050, reaching 6.7 million

#### **Employment:**

- 1.5 million jobs
- \$41,000 average annual wage



## The Process

During the Phase II workshop, two important exercises pointed out the need for cooperation among the various governmental bodies, regulatory agencies, water suppliers and other stakeholders involved in water use in Central Florida.

The workshop took place August 11 and 12, 2011, at the University of Central Florida Executive Development Center in downtown Orlando. On the first day, the audience met members of the technical assistance panel (TAP), which included a who's who of water experts from across the country. After presentations from example water cooperative efforts in the region and two exercises designed to help them gather facts and understand the region's circumstances, TAP members would make recommendations to steer Central Florida in the right direction.

## The Experts

The participants were selected because of their knowledge of water resources and their expertise in dealing with some aspect of water supply governance. With their extensive credentials, they were uniquely qualified to understand how to address the conditions in Central Florida and what the civic architecture of water use might look like in this region in the future.

The panelists included three former top water management district officials with a combined 50 years of hands-on experience in Florida and California: Woody Wodraska, Henry Dean and Chip Merriam. Both Wodraska and Dean have served as executive directors of the St. Johns River and South Florida water management districts, or in Dean's case, both. Merriam worked as deputy executive director for the South Florida district and directed the entity's activities in water management. Wodraska also served as the general manager and CEO of the Metropolitan Water District of Southern California for five years.

Doug Manson and Michael Minton brought the legal perspective to water governance. Manson has advised the Peace River Manasota Water Supply Authority and Tampa Bay Water, both on Florida's west coast, and recently served on Gov. Rick Scott's transition team, advising the governor on a number of issues including water management.

### Panelists

**Moderator: Richard (Rick) Foglesong**,  
Rollins College Dept. of Political Science

**Michael M. Bell**, Rayonier

**Chuck Cardin**, Tampa Bay Water

**Lee Constantine**, former Florida state  
senator

**Henry Dean**, GrayRobinson

**Douglas (Doug) Manson**, Manson Law  
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**Chip Merriam**, Orlando Utilities Commission  
(OUC)

**Michael Minton**, DeanMead

**John R. (Woody) Wodraska**, Wodraska  
Partners, Inc.

Minton holds expertise in a broad range of water topics and has focused on advising agribusiness on water supply issues.

Chuck Cardin brought the contemporary experience of someone who is charged with directing operations and facilities at Tampa Bay Water, which holds the distinction of being the largest wholesale water supplier in the Southeastern United States. He also brought to the group the context of the Tampa Bay region and its struggles to develop a civic architecture for water supply.

Lee Constantine brought the experience of water governance from the perspective of a former legislator with eight years in the Florida House of Representatives and 10 years in the Florida Senate. Lee was invaluable in helping the panel understand water governance issues through the eyes of local and state officials and the difficult decisions they have to make.

Mike Bell brought to the discussion the important perspective of agribusiness. As director of External Affairs for Rayonier, he helped the panel understand how water supply is viewed by people who work in the agriculture industry and how they perceive water governance.

The panel's moderator, Dr. Richard Foglesong, is an expert on Florida and U.S. politics, New Urbanism and the politics of urban growth. He holds the George and Harriet Cornell Chair in Politics at Rollins College, where he teaches in the college's undergraduate program in political science and its masters program in planning and civic urbanism.

With such a *who's who* of experts, the goal was to produce top-level recommendations for actions the *Congress of Regional Leaders* should consider as it looks toward the future and water supply governance in Central Florida.

## **A Multi-Jurisdictional Challenge**

In reality, Central Florida – and the entire state – may not have a water supply problem but instead a water production, storage and distribution problem. After all, the peninsula is surrounded by saltwater, dotted with lakes, lined with rivers and wetlands, and sitting on the Floridan aquifer. It's also rich with one of the largest annual rainfall amounts in the country.

The challenge lies in getting the water from its various sources and treating it for drinking, bathing, operating businesses, running homes, and caring for livestock and other everyday uses. And doing this across political and geographic boundaries.

This monumental task is going to become more challenging as Central Florida's population expands and the demand continues to grow. The average resident in Central Florida uses 100 to 150 gallons of water a day, much of it for outdoor use such as irrigating lawns. Even if conservation and education programs can get that figure down

to 90 gallons a day per person as has been demonstrated in other parts of Florida, the current supply is not endless.

It's clear the region will have to consider and eventually tap into alternative water sources, including these identified in Phase I of the project and identified in the white paper **Creating a Sustainable Water Supply in Central Florida: A Regional Strategy**:

- Brackish groundwater
- Gray water, untreated wastewater from uses such as showers or washing machines instead of toilets
- The lower Floridan aquifer, where it's separated from the upper aquifer
- Process waste streams, where water is captured, processed and reused as part of a commercial process such as a car wash
- Reclaimed water
- Seawater
- Stormwater
- Surface water
- Surficial or shallow aquifer water

Treating water from sources like these will take technologies and methods that require new or enhanced infrastructure. In other words, it will take extensive funding to pull water from these sources and develop it for use. Among the technologies and methods the region will have to consider:

- Aquifer storage and recovery
- Conjunctive use, such as surface water and groundwater interfaces
- Credits or offsets to traditional sources
- Desalination
- Direct and indirect aquifer recharge
- Irrigation with stormwater and reclaimed water
- Off-stream reservoirs
- Potable reuse
- Rapid infiltration basins
- Regional systems and interconnects, along with land use transitions
- Saltwater intrusion barriers
- Satellite reuse facilities at locations remote from wastewater treatment plants
- Tail water recovery

To begin using alternative sources, Central Florida will have to develop the civic architecture or governance structure that will allow water to be shared throughout multiple jurisdictions. Making this work will depend on several factors:

- Developing interconnected supply systems that use diverse sources of water.
- Efficiently managing and distributing water throughout the region.

- Creating an equitable framework of regulatory/statutory incentives that promotes mutually beneficial agreements and encourages areas with available water to partner with areas of need to share resources.
- Enforcing growth management and conservation policies that promote water use efficiency by all participating jurisdictions.

## Lessons Learned

Panelists and observers in the Phase II workshop heard presentations about multijurisdictional efforts – some that didn't work and others that looked promising. From the people who lived through these experiences, the region can glean some valuable lessons about how to structure future partnerships that will allow water to be shared across political borders.

Here are brief synopses of the presentations:

### Water Co-operative of Central Florida

**Presenter: Brian Wheeler, Central Florida Water Initiative**

The panel of experts and the audience heard first from what is perhaps the most promising project of those presented during this phase, partially because it's located in Central Florida and has taken into account the experiences of partnerships in other parts of the state.

The Water Co-operative of Central Florida is made up of four water utilities that have formed a coalition for the sole purpose of strengthening their efficiency and effectiveness in supplying water to their customers. The City of St. Cloud, the Toho Water Authority, Polk County and Orange County have an agreement to use their collective strength for all the necessary powers it takes to plan, design, permit, construct and operate a water supply. These powers of authority include contracting, financing, owning, leasing, constructing, operating, and establishing and collecting fees for projects.

Participation in specific projects is voluntary. In other words, an entity can participate in some projects and opt out of others. A partner can withdraw from the co-op altogether with 30 days' notice, as long as it fulfills any agreements that are already in place. Also, other entities can join if all the existing partners give their unanimous consent.

The co-op is governed by a board of supervisors consisting of one representative from each entity. The member has to be currently serving on the entity's board or commission. There are no specific terms of office – the length of service is determined by the entity appointing the representative. The board appoints an executive director and an attorney. It prepares reports, budgets and audits as required by law.

The board of supervisors uses a four-step process to build consensus among members: 1) Someone on the board nominates a project. 2) The co-op board accepts it, puts it onto a candidate project list, and submits the project to the governing boards of the respective members for approval. 3) The board explores it further and puts it on an approved project list with the consent of the member governments. 4) The co-op develops implementation agreements.

One of the key lessons the group has learned so far, Wheeler said, is that a partnership like this one works best if the smallest entity has the same amount of voting power as the largest. In their group, the City of St. Cloud is the little guy.

As the co-op matures, its members might look into some form of weighted voting, Wheeler said. But for now, the entities are focused on building trust among one another. Trust is the No. 1 barrier that erodes cooperative multijurisdictional relationships, experts say. It can torpedo a project faster than any other issue.

The future of the co-op remains to be seen. One of the panelists said the partnership will work as long as attorneys stay involved in putting all agreements in writing and making sure all of the entities understand their roles and their obligations to one another.

## **Volusia County**

**Presenter: Mary Anne Connors, Volusia County Government**

In 1990, some Volusia County cities banded together to face the challenge of finding the best ways of supplying water to residents and businesses. A fairly large county geographically, Volusia and its 16 cities are split between the eastern portion, which borders the Atlantic Ocean, and the western portion, which is inland, with a significant undeveloped area in between.

The entire county was using groundwater sources and hampered by a sole source aquifer situation. The St. Johns River Water Management District, which oversees Volusia's water use permits, had restricted groundwater withdrawals because of flow levels for Blue Springs, saying it was protected as a manatee breeding area.

Staff members of the cities represented members of the water alliance. However, only the members that had already been issued consumptive use permits from the water management district were allowed to vote on how the group handled its joint projects. A CUP allows water to be withdrawn from surface and groundwater supplies for uses such as public drinking water, agricultural and landscape irrigation, and industry and power generation.

The Volusia Water Alliance was succeeded by the Volusia Water Authority from 2003 to 2009. Local elected officials were appointed by their jurisdictions to serve as representatives. Each member had one vote, without regard to CUP status. Initial funding came from the water management district, and member entities contributed based on population, gallons produced, and population values.

The group anticipated it would eventually fund itself through sales of water and that all water supply facilities would be developed and operated by the water authority.

However, when it became time for serious conversations about money, the group disintegrated. Members couldn't agree on how to handle voting. There was opposition to the "one member, one vote" approach, and consumptive use permits came back into the discussion. The group talked about making the authority govern only new supplies and not current ones. Then the water management district withdrew its support for projects that involved groundwater.

In essence, an issue of trust and the lack of common need broke apart the county's efforts. Afterward, two groups tried to define shared water projects. The east part of the county was focused on stormwater management and the West Volusia Partnership is identifying water supply projects for its coalition.

The county and its municipalities learned some difficult lessons from past efforts. For one, commitment to making a coalition work comes from having a common need. It's important to identify projects and then determine what partnerships are needed to support them. Identifying funding sources early is key. Finally, when a coalition isn't working, cut loose the weak links or those entities that don't want to participate.

### **Yankee Lake Regional Water Treatment Facility, Seminole County** **Presenter: Andrew Neff**

Seminole County is almost finished with Phase I of a two-part project that involves developing an alternative supply source that will be capable of providing water to multiple counties and cities in the future.

Under the Central Florida Coordination Area phase one rule, water management districts were capping groundwater availability in 2013. As a result, the county holistically approached the Yankee Lake Regional Water Treatment Facility project with an integrated strategy providing for reclaimed water augmentation that would reduce groundwater used for irrigation while positioning for potable supply in the future. County leaders obtained state and federal permits, lined up contractors for the facility's design and construction, and secured funding. As the project progressed, 16 utilities originally expressed interest – a number that was later reduced to nine water utilities as the deal matured. This resulted in a Phase I price of \$291 million for the water treatment plant and \$132 million for transmission costs.

The potential partners were very interested. After all, they were looking for new water sources for the future in view of the 2013 time constraint. But in the end, a deal couldn't be reached for a variety of reasons, including governance and cost, particularly transmission to potential partners.

The governance issue centered on ownership. Potential partners wanted part-ownership in the project. Instead, Seminole County was offering to provide water on a “take or pay” basis, allocating capacity to participants. The county argued that it had taken all the risk and bore the cost in developing the infrastructure and it was in the county’s best interest to own the project.

Since the time the original partnership deal failed to gain momentum, the economy worsened and water demands fell, pushing the need for potable alternative water supplies much further in the future. That being said, the water management districts are working with water utilities and other water interests in the Central Florida area to fully examine the amount of available groundwater to serve future needs.

Seminole County says it remains open to future partnerships, including discussions on governance, both for reclaimed and potable water, as communities assess their needs moving forward.

Today, Seminole County is looking toward a spring 2012 completion of its first phase, which will draw water from the St. Johns River – taking care, with specially constructed gates, to make sure manatees swimming near the facility are not harmed. County leaders are hoping to re-engage the potential partners to participate in Phase II of the project, which already has the existing permits necessary but is on hold for now. The project is expandable and can accommodate many partners in the future.

## **Tampa Bay Water**

### **Presenter: Chuck Carden**

To the west of the Central Florida region, several governmental bodies came together more than a decade ago to create what is today Tampa Bay Water, an exclusive wholesale water provider with a monopoly on the supply for the entire region. The entities knew that by working together, they could produce an abundant, environment-friendly and cost-effective water distribution system that would be much more efficient to operate than anything they could do individually.

Environmental concerns and legislative pressure led to the creation of the agency to end litigation, develop alternative water supplies and reduce groundwater pumping. Today, Tampa Bay Water has one of the most diverse water supplies in the country, using groundwater, surface water, and desalination. It has reduced the area’s reliance on groundwater supplies by ramping up its use of the other sources.

In creating the new agency, the partners asked many questions about how they wanted to begin this tenuous process. What was the goal? What were its objectives? How did it want to operate?

Along the way, other questions arose in creating this new civic infrastructure:

- Who should own and operate the wholesale water supply?
- How should capital, operations and maintenance, and facility services be shared?

- What is the best combination of governance and financial structures?

The group of local leaders aimed for an all-inclusive process that would leave parochial interests at the curb and encourage all participants to focus on the good of the region. Today they feel they have achieved that. The utility is governed by nine board members, all elected officials, two each from the three counties and one each from three cities in the region. Part of the funding for this effort came from the South Florida Water Management District (SWFWMD), which oversees the area's water permits. To date SWFWMD has contributed more than \$350 million in capital funding to Tampa Bay Water in support of alternative water supply projects. The key feature of the new agency was the provision that each member government would pay the same rate for purchased water.

It has been argued that some made out better than others in the new arrangement. For instance, Pinellas County and St. Petersburg agreed to sell their existing assets to the new agency and ultimately assumed paying for new infrastructure. They also would not have any more power in the group than any other entity. Balance that with the fact that their groundwater permits were up for renewal and the regulator was not going to issue new ones without a fight involving many lawyers. Hillsborough and Pasco counties, where the new growth was concentrated, saw their costs decrease because of the uniform rate.

The partnership is still going strong. Among the lessons learned during its startup:

- Operating costs were always projected with annual increases because of large debt service commitments. As time goes by, some forget that this was the plan.
- “Not in my back yard” is alive and well, so partners have to be mindful of that when choosing locations.
- Regional thinking needs reinforcement in the form of constant reminders of why the partners need each other.

## **Peace River Manasota Regional Water Supply Authority**

**Presenter: Doug Manson**

In some parts of the state, certain counties are like the Saudi Arabias of water, with supplies that are so rich, they can sell them the same way Middle Eastern nations capitalize on their abundance of oil. Other counties are water-poor. This is when it becomes crucial for regions to think as a team instead of being territorial.

In Southwest Florida, where most of the water supply is to the north, four counties make up the Peace River Manasota Regional Water Supply Authority to supply the wholesale drinking water supply: Charlotte, DeSoto, Manatee and Sarasota. Hardee County was an original partner in 1982 but withdrew from the coalition two years later. In 1991, when the authority acquired the Peace River facility, the City of North Port joined the group.

Under an interlocal agreement, the member counties and North Port are granted a preferential right to purchase water from the authority. There are two classifications of customers: one based on water allocation, and the other based on being an exclusive provider.

All of the entities are co-permittees, meaning water use and construction permits are granted to them as a group rather than individually. This helps even the playing field and keeps everyone as equal partners. All water supplies are put into a virtual “pool” to be doled out as needed among the partners.

The agreement also implements a common debt service cost for a regional expansion program and future projects. In addition, it creates a planning process that allows members to submit proposed projects every January and calls for members to make a seven-year commitment and plan out the region’s projected demand for the next 20 years.

Setting up the governing documents for the water supply authority took 1½ years. It was worth the effort to get everything into place so there are no misunderstandings, members say.

One of the lessons the group learned is that trust is the biggest issue water supply coalitions face. Everything has to be put in writing for all of the players to feel comfortable. Once the projects are up and running, and they’re supplying water, it becomes easier for confidence to build and for everyone to feel like a part of it. Until then, it’s common to hear grumbling behind the scenes about territorial disputes and one municipality or government trying to “do something to” another. Getting through that rocky part of the start is key.



## Recommendations

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From the robust discussions that took place during the Phase II research, it became clear there are numerous paths Central Florida could take to set up a civic architecture or governance structure for sharing water resources.

What you will see next is two sets of recommendations. The Technical Assistance Panel produced a list of “best practices” these experts suggest for consideration. Then the Regional Water Strategy Steering Committee accepted the TAP recommendations and modified them into actionable items tailored to meet Central Florida’s current governance and needs.

### Technical Assistance Panel Recommendations

With the expert help of the TAP, and input from local leaders who have followed water concerns for years, a few recommendations emerged as the best choices for this region. Those recommendations are outlined in these best practices compiled by the panel.

#### Recommendation 1 Conservation

- **Focus on conservation first**

Just as in Phase I of the project, which was outlined in the white paper **Creating a Sustainable Water Supply for Central Florida: A Regional Strategy**, the first recommendation the experts in Phase II came up with was about conservation. Everyone recognizes that slowing down the region’s use of water is not the full answer, but it helps area leaders buy time to implement alternatives.

Just as importantly, conservation efforts would have another important effect panel experts pointed out: Conservation would help shareholders build trust in one another. In pulling together for a common cause, they’ll start building alliances and learning how to work with each other. Those skills become essential when it is time to start signing agreements about spending money to begin new water supply projects.

- **Develop memoranda of agreements (MOA) among local governments in Central Florida to achieve conservation measures**

As the case studies indicated, it’s crucial to put any agreements in writing. Simple misunderstandings about what is expected from each party can end in not just a broken coalition, but also deep-rooted resentments among government entities that can escalate into feuds. Why risk it?

The MOAs should address key issues that include:

- Variable rates, tiered to drive conservation
- Reuse requirements for all new construction
- Aggressive public education
- A consistent per-capita platform for water use
- Self-supply irrigation
- Leakage losses and non-revenue water in distribution systems
- New water standards phased in over a five-year period

## **Recommendation 2**

### **Create Regulatory Efficiencies**

- **Redefine water management district priorities and responsibilities in Central Florida for water supply planning and regulation**

*Create a Pilot Program in which the Congress of Regional Leaders Nominates a Water Champion to Governor / DEP Secretary for his Selection to be Ratified by the WMDs to Implement the Following Recommendations.*

An interesting aspect of this recommendation was the directive that the *Congress of Regional Leaders* nominate a “water champion” who would preside over the establishment of new civic architecture or a new governance model for the day-to-day, month-to-month operations of carrying out a regional water plan. This champion should be someone diplomatic and knowledgeable enough about the region’s water supply to be able to build consensus and garner respect and from all parties involved, and could even be a leader from the Department of Environmental Protection. The recommendation calls for making this part of a pilot program that could work in other parts of the state.

Under the recommendation, the *Congress of Regional Leaders* would send its nomination to the governor and/or the secretary of the Florida Department of Environmental Protection for approval, and the appointment would be ratified by the water management districts.

- **Separate the duties of water supply planning from regulation in Central Florida**

The panel recommends that the three water management districts in Central Florida divide their duties and do away with the overlap to promote regional cooperation. In this scenario:

- One district would have primary responsibility for water supply planning
- One district would be in charge of project implementation and financing
- One district would have oversight of regulation within the Central Florida area

In addition to outlining how the three water management districts would divide their duties in Central Florida, the agreement would also:

- Establish uniform water management district water supply regulations throughout the region
- Establish uniform models and tools throughout the region
- Create economic incentives for alternative water supply sources to include 50-year durations

### Recommendation 3

#### Define water management districts' mission for Central Florida

- **Relative to the Central Florida water supply, the water management districts are “fractured”; however, if redirected, they will have an invaluable role in assuring the necessary water infrastructure for Central Florida’s business and population growth**

Dividing and focusing the responsibilities of the three water management districts that have jurisdiction in Central Florida would accomplish more than just streamlining the operations, panel experts said. Taking these measures would also help establish the right infrastructure for promoting the region’s best possible way to grow.

At the moment, with all three having a say in parts of Central Florida, the rules can appear to be uneven and confusing. Creating a level of organization that gives each district’s employees and appointed officials specific roles will level the playing field for the customers: the region’s water suppliers and the individuals who live and work in the region.

- **The *Congress of Regional Leaders* should define success for water management districts’ water supply mission in Central Florida**

It’s impossible to know whether you’ve succeeded unless you understand your mission. What would a successful regional water strategy look like? The area’s elected officials need to define that, before moving forward and executing any plan.

The recommended mission should include:

- Establishing a clear statement of the mission of water management districts as problem-solving organizations
- Establishing milestone dates for completing key water supply tasks within Central Florida

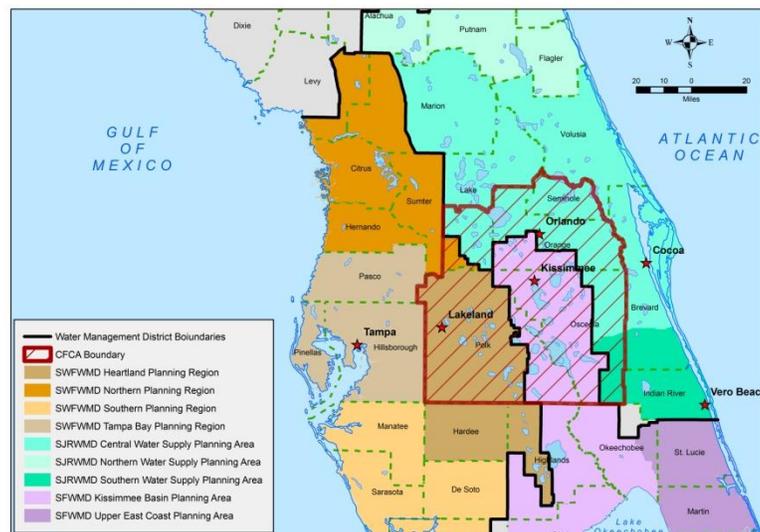
- **Water management districts should not issue consumptive use permits for new water with a duration greater than five years until a unified water supply plan is adopted for Central Florida**

The experts felt it was important to start setting the scene right away for projected development and growth of a viable unified water supply plan. Instead of approving use that would conflict down the road with any new measures, they recommended making any new permits short-term so they don't have to be grandfathered in or rescinded in favor of a new cohesive strategy that takes the whole region into account.

Among the dates and landmarks recommended:

- June 2014 – Adopt a unified water supply plan for Central Florida
- January 2015 – Initiate funding for priority Central Florida water supply projects, using a minimum of 40 percent state funds
- Establish benchmarks for water management district performance and monitor them annually
- Ensure benchmarks consider the following as a minimum:
  - Water resource development
  - Financial support for AWS in Central Florida
  - Consideration of a new Central Florida Coordination Area rule to establish a date for meeting AWS requirements based on strong scientific data
  - Create *one* Central Florida Regional Water Supply Plan linked to local governments' comprehensive plans. There are currently *five* regional water supply plans

Central Florida Coordination Area & WMDs Planning Areas / Regions



- Make sure all consumptive use permits are certified consistent with Regional Water Supply Plan
- Ensure that the funding of water supply improvements garners a finding of consistency with a regional water supply plan

- Use the written regional water supply plan process to resolve conflicts among local governments and agriculture for water supply allocation

## Regional Water Strategy Steering Committee Recommendations

After the TAP completed its tasks, the Regional Water Strategy Steering Committee reviewed the panel's recommendations. With grateful acknowledgment to the members of the panel, Steering Committee members discussed how the essence of the panel's ideas could best be implemented in Central Florida.

The Steering Committee recommends that the *Congress of Regional Leaders* accept and advance to the appropriate organizations the following four recommendations for how Central Florida can best align and balance local, regional and state needs and interests as it seeks regional solutions for long-term water supply necessary for future growth and prosperity.

### Recommendation 1

The *Congress of Regional Leaders* should institute a pilot program in Central Florida to develop a civic architecture that takes into account local needs, regional priorities and state interests. This would help the region define and solve the challenges of regional water supply planning, from the technical and scientific to the political and governmental.

By putting its full support behind a regional pilot program, the *Congress of Regional Leaders* could begin to create what will eventually become a regional civic architecture for governing water supply throughout its seven counties, 86 municipalities and three water management districts.

The objective of endorsing a pilot project is to achieve the following objectives and bring the region closer to establishing a sustainable water supply:

- Create one baseline reference condition as a basis for water supply planning
- Create one model for evaluating water supply conditions in Central Florida
- Establish one uniform definition of environmental harm for use in evaluating alternative water supply approaches
- Establish one process for permit reviews
- Establish one set of consistent processes to set minimum flows and levels (mfl's) and reservation of water supply capacity
- Create one coordinated recovery and prevention strategy

## Recommendation 2

The Steering Committee recommends that the best choice to implement the pilot program is to support the current and ongoing efforts of the Central Florida Coordination Area (CFCA), also known as the Central Florida Water Initiative (CFWI). The organization has already created the outline of a governance structure that can be replicated.

## Recommendation 3

Central Florida should develop a similar civic architecture to address consistent regional standards and incentives for conservation.

The Steering Committee recommends using the CFWI pilot program group to address these standards that could be applied across the region.

It is essential that the pilot group focused on a civic architecture for sharing regional water resources also be committed to conservation.

## Recommendation 4

The CFWI pilot group should report its progress to the *Congress of Regional Leaders* either biannually or quarterly. This will help both entities prevent misunderstandings, help them course-correct along the way, and lead to a greater sense of cooperation and collaboration across the region.

### Why the CFCA/CFWI

- Has already formed a governance structure.
- Its entities are working together strategically and tactically.
- Has aligned its mission on local, regional and state needs.
- Has tackled inconsistencies in how the three water management districts' plan for the future.

## Conclusion

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The days of cheap, plentiful groundwater are over in Central Florida. The question now is, who is going to build the most cost effective alternative supply, and who is going to control it? This is a process fraught with conflict, which is why, for the most part, such efforts have been adjudicated by the court system – at a cost of millions of dollars in legal fees that don't produce additional water.

That there is a lack of trust in the planning process is almost axiomatic. It remains to be seen whether we will be able to overcome these differences or whether we are predestined to re-learn the costly lessons of the past.

Central Florida needs one plan. And once a plan is established, we need to make it stick.

In addition to a plan, we must agree, as a region, on a financing strategy and an enforcement mechanism, with real consequences and accountabilities.

Time is of the essence. There is no question we have reached the sustainable capacity of our existing water supply. Conservation, an essential part of the solution, can, at best, buy us the seven to 10 years it will take to bring sufficient alternative drinking water sources online.

The crisis is real. Our only choice is a way to work together to solve it, or wait, as others have done, and have the solution imposed on us by outsiders, through the courts.

This white paper provide a comprehensive overview of what has been tried, what has worked, and what has not worked. We would like to thank the Congress of Regional Leaders for its foresight in trying to address these concerns now, while the issues can still be resolved outside the courtroom. That window of opportunity is closing, however, and the time to act is now.