

# Central Florida Water Initiative

TOHO Water Authority  
Kissimmee, Florida

Friday, February 1, 2013

## Meeting Minutes

(All presentations made to the Steering Committee have been posted on [cfwiwater.com](http://cfwiwater.com).)

### 1) Introductions- 9:40 AM

- a) Greg Munson, CFWI Steering Committee Chair, opened the meeting and turned the meeting Chair over to Brian Wheeler.
- b) Self introductions of Steering Committee (SC): Dan O'Keefe (SFWMD), Paul Senft (SFWMD), John Miklos SJRWMD), Greg Munson (FDEP), Brian Wheeler (TOHO Water), Rich Budell (DACS).
- c) Audience introduced itself. Sign in sheet posted to website.

### 2) Consent Items

- a) Minutes of the November 6, 2012, SC meeting were approved
- b) Revisions to Guidance Document dated were approved as proposed. (02012013 version posted to [cfwiwater.com](http://cfwiwater.com))

### 3) CFWI Schedule

- a) Brian Wheeler reviewed the detailed scheduled of activates leading up to the presentation of the groundwater availability results to the Steering Committee on May 31, 2013.
- b) John Shearer indicated that this schedule will be updated regularly by the GAT and posted to the CFWI website.

### 4) Hydrologic Analysis Team

- a) Akin Owosina reported the "Preliminary HAT model output" was delivered on time, January 31, 2013.
- b) HAT celebrated the "pencils down" calibration task milestone meaning the model has met (and in this case) exceeded the calibration criteria. For the model to be useful it has to be further assessed when applied to the measuring sticks demonstrating that it can reliably discriminate between multiple scenarios. The initial runs may have to be rerun

depending on the findings of the overall assessment and the application to the measuring sticks.

c) Upcoming HAT Activities:

- i) Complete the water budget assessment for new model
- ii) Complete assessment of model performance over the CFWI region
- iii) Finalize 2035 Water Use projections for model input in collaboration with the RWSP and FDACS
- iv) Run future condition scenarios (End of Permit & 2035)
- v) Interpret model results with other technical teams
- vi) Documentation of model recalibration and application
- vii) Configuration management and version control strategy

d) Steering Committee praised the effort of the HAT and thanked Akin and the team for a job well done.

## 5) Groundwater Availability Team

a) Mark Hammond reviewed the CFWI Guiding Principles and background, the schedule for the next three months including an expectation of SC policy decisions anticipated to be needed and a brief review of the water resources with the CFWI previously discussed with the SC.

i) March 29

- Confirm Groundwater Assessment Process
- Preliminary Assessment of Current Conditions
- Policy-level Discussions
- Public Input

ii) April 26

- Preliminary Findings for Groundwater Availability
- Current Conditions
- Future Conditions
  - EOP & 2035
  - Options
- Policy-level Discussions
- Public Input

iii) May 31

- Groundwater Availability Results
- Policy-level Discussions
- Public Input

## 6) Regional Water Supply Plan Team

a) Tom Bartol provided an updated summary of the progress

- i) Population projections, demand projections, and water conservation potential substantially complete

- ii) Development and writing of RWSP chapters underway
  - iii) Critical path to completion of RWSP remains groundwater availability from the GAT in May 2013
- b) Tom stated the 2035 future demands to be in the neighborhood of needing approximately 310 MGD additional water over 2010 water use as follows:

<u>Use</u>	<u>2035 Additional Water Needs (MGD)</u>	
Public Water Supply	218	70% of total need
Landscape, recreation, aesthetic	32	
Agriculture	29	
Commercial, institutional and industrial	22	
Power generation	5	
Domestic self supply	4	

- c) Tom reviewed spatial breakdown of needs by county (all uses):

<u>County</u>	<u>2035 Additional Water Needs (MGD)</u>
Orange	116
Osceola	91
Polk	50
Lake	38
Seminole	16

- d) Tom reviewed spatial breakdown of needs by water management district:

<u>WMD</u>	<u>2035 Additional Water Needs (MGD)</u>
SJR	136

SF 128

SWF 49

- e) SC and Tom noted that the End of Permit (EOP) allocations are very similar to the projected 2035 demands.
- f) SC had questions related to large increase in demands especially in the next few years. Tom explained how Bureau of Economic and Business Research (BEBR) is used as the basis of the estimates. He agrees the BEBR projections lag actual demands, which can over or under estimate short-term growth. Tom reminded the SC that although total regional historic water use appears to have slowed down, there is still a consensus of the Team that overall demand will increase. Historically, CFWI water demands have been reduced by significant reclaimed water use and conservation. Additional demand reductions due to reclaimed water use and conservation may be more limited going forward because the “low-hanging” fruit have already been taken, and we should expect increases in water use. Tom agreed to review the projections (including consideration of reclaimed water and conservation) and bring the results to the next SC meeting.

#### **7) Solutions Team (new)**

- a) Robert Beltran (SWFWMD, Deputy Executive Director) was introduced as the Team Leader of the new Solutions Team (ST).
- b) Robert indicated that he would be working through the Management Oversight Committee to draft a scope of work for the Solutions Team for consideration by the Steering Committee. He said the detailed work of the Solutions Team would start in late summer as the RWSP is nearing completion. A great deal of public outreach will be conducted and the work of the ST should take at least 12 months.
- c) The Steering Committee wanted Robert to review the water projections and determine the best way to present them to the public. Water use estimates in the recent past have been affected by conservation, water reuse and other demand management efforts.
- d) Dean Powell briefed the SC on an Item on the agenda of the Feb 14 SFWMD Governing Board @ the Greater Orlando Aviation Authority. He wanted the SC and the people following the CFWI effort to be aware of this item. He explained it is part of a settlement from 2007 just now being completed. It relates to the STOPR utilities and the commitment by SFWMD of \$465k to help fund a “water wheeling” study among its members. Brian Wheeler said this is a very positive accomplishment.

#### **8) Myregion.org**

- a) Robert Beltran reported that on December 13, 2012, Blake Guillory (SWFWMD Executive Director) attended the Central Florida Legislative delegation meeting hosted by the Central Florida Partnership and focused on Central Florida’s Regional Priorities in Daytona Beach. He explained the CFWI effort of the areas three Water Management Districts and reported that he received positive feedback and support.
- b) Paul Senft also attended. Paul reported that the new class of freshman legislators were not fully aware of the coordinated effort and urged we engage them as this process continues toward completion.

#### **9) Open Discussion**

- a) Paul Senft expressed his pleasure with the progress being made and was hopeful this process could be utilized in other areas throughout the state as a model for addressing complex water resource challenges across WMD boundaries.
- b) Melissa Meeker, SFWMD's Executive Director, took the opportunity to discuss ideas regarding water management district consistency and the MFL/Reservation Team. Specifically, she urged that the MFL/Reservation Team should participate by defining "measuring sticks" that could be used by the model to define, at a planning level, groundwater availability rather than focusing on regulatory consistency at this time.
- c) Brian Wheeler expressed his interest in having the three water management districts consistently identify water available for consumptive use permit applicants and indicated that measuring sticks need to be interpreted the same way across district boundaries. Melissa Meeker assured the group this was possible, and that CFWI should retain its focus as a planning process and not become an MFL development process.
- d) Greg Munson emphasized that water supply projects identified in the CFWI plan should have a high likelihood of permitability.
- e) Dan O'Keefe expressed concern that developing a consistent MFL regulatory program for CFWI, at this time, would result in additional involvement of SFWMD stakeholders and delay CFWI progress.
- f) Rich Budell concurred with this point. Identification of "measuring sticks" for the model to evaluate environmental performance is the appropriate step at this point.

#### **10) Public Comments**

- a) Joan Lawrence (U.S. Department of Interior) discussed the importance of the Upper Kissimmee River basin, expressed concern that regional groundwater withdrawals might impact the region and the relationship of the area to the Everglades restoration efforts.
- b) Andy Neff (Seminole County Environmental Services) spoke in support of the new Solutions Team and feels this will be a significant part of CFWI. He said this will be an important part of the overall effort and said that Seminole County has made big investments in AWS.
- c) David Gore (Haines City), said he is a long time resident of this area of Florida and is concerned with the loss of wetlands and lowering of lake levels. He stressed the importance of storage and recharge to protect the water table.
- d) Written comments (attached) from Ed McDonald were reviewed by Dean Powell. Copy of his remarks is appended to the meeting minutes. They were also distributed to the Steering Committee.

#### **11) Next Meeting of the Steering Committee**

- a) 9:30 AM, Friday, March 29, 2013, @ TOHO Water Authority, Kissimmee, FL

#### **12) Adjourn- 11:30 AM.**

## **Public Comments to the February 1, 2013 Central Florida Water Initiative Steering Committee Meeting**

My name is Edward McDonald and I live in Auburndale, Florida. Please note the following comments and questions that I would like to see addressed by the various CFWI sub-committees and where appropriate by the members of the steering committee. Some of my questions have been raised directly to members of the various sub-committees, but it's my opinion that making them part of the public record for this effort is important.

This initiative started many months ago with a statement of goals and it's time, in my opinion, to look at these goals and their purpose and to evaluate the progress made to date by the sub-committees to meet these goals. It is also important to step back and take a larger view and look at outside events that may have an impact on the ultimate goal of protecting our water resources through an effective regional water supply plan that is reflected in Florida laws.

The following are the stated goals of the CFWI:

1. One model
2. One uniform definition of harm
3. One reference condition
4. One process for permit reviews
5. One consistent process, where appropriate, to set MFLs and reservations
6. One coordinated recovery and prevention strategy (to be achieved through the CFWI RWSP process)

Even though there are six goals stated, it's clear that they are all highly interrelated and interdependent.

The development of an accurate, third party scientific peered reviewed hydrologic model of sufficient resolution and breath is clearly an essential part of developing a clear understanding of Central Florida's water resources. What is also important is to clearly state the purpose of the model and to indicate in no uncertain terms the limitations of the model, i.e. what it can and cannot do. I have followed the consumptive water use permitting process that is currently used by the water management districts and have watched applicants struggle to piece together model data to demonstrate the impact of their proposed groundwater withdrawals. It's my opinion, that if the model currently being developed by the Hydrologic Analysis Team cannot be used for the purpose of evaluating consumptive water use permit applications then it has not addressed one of the largest money and time wasters in the current permitting process.

The following are the listed team objectives for the Hydrologic Analysis Team:

Provide necessary modeling tools and data analysis and work collaboratively with other Initiative teams to:

- 1) Evaluate the current and future availability of groundwater;
- 2) Assess future water supply and management strategies;
- 3) Develop processes to assess the long-term effectiveness of the management

- strategies;
- 4) Support collaborative water supply planning;
  - 5) Support future regulatory actions.

The availability of ground water objective needs additional clarification. Groundwater is all water found below ground. The term future means forever. Availability means sustainable and without harm. The term management also needs clarification. Management can imply active manipulation of natural systems. I think everyone agrees that the best (cost effective) management strategy is one that sustains naturally occurring processes with minimum intervention. Also, as indicated above, the support of future regulatory actions objective needs to include the WUP approval process.

The definition of harm is both extremely important and difficult to define. Harm is essentially the measure used to determine the availability of a given water source. How can harm be defined without looking at the past? The Florida of today is not the Florida of the past. How does the Environmental Measure Team quantify all of the wetlands, flood plans, and other water related ecologies that existed in the past, but are no longer present? How does one measure the importance of what has been lost? It's important to evaluate the current status of our wetlands and surface waters, but it's just as important to view current conditions in the context of historical data. What criteria will the Environmental Measure Team use to identify those areas that require restoration to improve not only water availability, but water quality?

The Environmental Measure Team has the following objectives:

- 1) Evaluate current environmental condition of wetlands and surface waters in the CFWI, and develop options for quantitative relationships to hydrologic conditions using appropriate scientific methods;
- 2) Apply model output to quantitative assessment relationships developed.

The objective "Apply model output to quantitative assessment relationships developed" needs clarification. I have read documents submitted by WUP applicants that state something to the effect that because the impact of their proposed groundwater withdrawals will result in a lowering of the water table by less than 0.1 foot that this demonstrates lack of harm. The idea that the definition of harm can be given a numerical value that can be applied universally defies common sense and logic. As discussed previously, the definition of harm is contextual. Many areas have already experienced harm and any action that does not mitigate that harm must be evaluated accordingly. Those of us that live within the SWUCA understand the consequences of the lack of understanding with regards to the definition of harm.

It's my opinion that the Minimum Flows and Levels and Reservations Team is very similar to the Environmental Measure Team in that harm and how it is identified is the critical issue. It's clear that every withdrawal of groundwater results in change to the natural system. What's difficult to determine is at what point does this change result in harm. There are times when groundwater withdrawals can

result in immediate and profound harm. Past presentations prepared by team members have demonstrated that varying levels of confinement and the presence of Karst features can transmit changes in the water table related to pumping directly to surface features. There are other scenarios where the harm is not traceable to a single withdrawal source, but is the result of the cumulative impact of all withdrawals.

The following are the Minimum Flows and Levels and Reservations Team objectives:

- 1) Review and understand the various approaches used by the WMDs to set MFLs/Reservations;
- 2) Identify commonalities and differences in the approaches currently used to set criteria;
- 3) Develop options for a standard methodology to establish MFLs/Reservations, including:
  - a. options for uniform definitions of "significant harm" for the different water body types (wetlands, lakes, rivers, springs) within the CFWI;
  - b. options for definition and application of baselines;
  - c. options for uniform metrics to express MFL criteria;
  - d. a "tool box" of methods applicable for different water body types and settings within the CFWI.
- 4) Evaluate current peer review process of each WMD in order to develop options for a standard procedure to peer review MFLs and Reservations within the CFWI and peer review the methods developed under #3 if appropriate;
- 5) Develop guidelines for implementing MFLs in the consumptive use permit program, planning efforts, and water shortage determinations where appropriate;
- 6) Coordinate with the Environmental Measures and Hydrologic Assessment Teams to develop measures to evaluate MFLs and Reservation criteria in the model application;
- 7) Establish a collaborative process to update the priority water body lists to adopt new MFLs and Reservations or reassess established MFLs.

It's my opinion that the objective 3, "Develop options for a standard methodology to establish MFL's/Reservations" needs clarification. First, I agree that the designation of MFL's can be an important regulatory tool for managing Central Florida's water resources, but harm can occur anywhere. It's not limited to specific, pre-identified locations. In addition, minimum flows and levels for surface waters cannot be set in the vacuum of the world of water management. There may be recreational, economic, commercial/industrial, esthetic and ecological reasons for establishing minimum levels that would fall outside of the definitions established by the water management districts. I also have a problem with the term "significant harm". To me, this seems like an exercise in semantics. Is there such a thing as acceptable harm? Harm is harm and it will be the sub-committee's job to determine how it is identified.



The Data Monitoring and Investigations Team is tasked with the very important function of melding all available information into a consistent database that is used by all impacted water management districts. The stated team objective is to provide a single reference point for available data and investigations. This team will work collaboratively with other Technical Initiative Teams and agencies to:

- 1) Develop and maintain an inventory of available hydrologic, environmental, and other pertinent data and investigations in the region;
- 2) If approved by the Steering Committee, investigate the feasibility of developing a web-based portal that enables users to access available data and investigation reports from the different sources responsible for collecting and producing this information in the CFWI;
- 3) Establish minimum standards for future CFWI data collection, including data collected to meet regulatory requirements;
- 4) Inventory investigations and data collected in support of the other Technical Initiative Teams;
- 5) Identify areas of insufficient or potentially redundant data collection.

I personally am looking forward to seeing (and using) the data, reports, studies, test results, etc. that this team will be accumulating and cataloging. I have spent hundreds of hours on water related websites searching for information relating to Central Florida's water issues. Item 2 above implies that the team requires approval from the Steering Committee to develop a web-based portal to disseminate this information. If the Steering Committee has not already done so, I am requesting that they proceed, right now in today's meeting, and authorize this effort .

The Groundwater Availability Team has the function of combining the work done by the Hydrological Analysis Team and the two "Harm" Teams and develop an approach that optimizes the utilization of Central Florida's water resources . To me, this work must be done in a transparent and science based manner that can withstand legal challenges. The results of this sub-committee's efforts will indicate the full extent of the water supply issues that face Central Florida. It will clearly show the maximum amount of water that can be consumed from these resources. This work will not and in fact cannot "solve" Central Florida's water supply problems, but it will put an end to speculation concerning how much water is available from each resource.

The Groundwater Availability Team's objectives are to apply modeling tools (and work documentation) to evaluate resource impacts to:

- o Lakes
- o Wetlands
- o Rivers/Springs
- o Saltwater Intrusion

Future groundwater availability will be based on analysis of modeled drawdowns, the environmental impacts that are expected to be associated with those drawdowns, and available water management activities to selectively offset predicted future environmental impacts. The amount and location of

groundwater that can be withdrawn, with other water management activities, without causing unacceptable impact to the environmental conditions associated with wetlands, springs and lakes will be evaluated.

Again, it's important for me to emphasize the importance of minimizing the use of proactive intervention to "manage" environmental impacts. In the case of remediation where harm has already occurred and the reduction in water withdrawals is either insufficient or impractical to implement then a proactive, engineered solution may be unavoidable, but it should never be used as an excuse for developing a plan that exceeds the natural capacity of a water source.

Goal number 6, one coordinated recovery and prevention strategy (to be achieved through the CFWI RWSP process) is listed as a future phase activity and has not been assigned to a sub-committee team. The area covered by the Central Florida Water Initiative covers all of Polk County. Most of Polk County falls within the boundaries of SWUCA. Clearly for the CFWI work to have maximum impact it must be coordinated with the on-going SWUCA recovery strategy. I am requesting that the Steering Committee recognize that goal number six is not a "future" activity and that this work be assigned resources, given objectives and a scheduled completion date.

As I indicated in my opening statements, I have been looking at the efforts of other groups to address the water supply issues of Central Florida. To that end I have included an article that was written by Mr. Tom Palmer and published in The Ledger newspaper this past November. I have highlighted in yellow those parts of the article that reference water supply planning.

### **"Summit Considers Water Supply Planning for the Four Corners Area**

Four Corners area leaders also look at transportation and land use.

*By Tom Palmer*

*THE LEDGER*

*Published: Thursday, November', 2012 at ro:31 p.m.*

CHAMPIONSGATE I Residents in the region who wonder where their future supplies of water will come from and how much it will cost should pay attention to efforts to draft a water supply plan for the four-county region that includes Polk County, a group of business and civic leaders were told Thursday.

The water discussion headed a list of topics that also included transportation and land planning at the Four Corners Summit convened by the Four Corners Area Council at Championsgate on the Polk- Osceola line.

Four Corners refers to the area where the boundaries of Polk, Osceola, Orange and Lake counties meet. The council was organized in 2005 by the Kissimmee-Greater Osceola Chamber of Commerce.

The heart of the water plan is the development of a model that "will tell us where the water is and isn't," said Blake Guillory, executive director of the Southwest Florida Water Management District, one of three regional water agencies that have jurisdiction in different parts of Central Florida.

Guillory said the purpose of the model and the plan is to figure out the source of the additional 310 million gallons a day of water to meet a projected demand over the next 20 years.

Although conservation was mentioned often during Thursday's discussion, the talk also turned to setting up a regional pipeline system to distribute not only drinking water, but also reclaimed water – treated sewage or effluent – for irrigation and other uses.

Guillory said public meetings on the plan are scheduled to begin early next year with formal approval of the plan by local governments by summer.

Everyone acknowledged that implementation of the plan could run to more than \$1 billion and would have to be financed mainly from utility rate increases and property taxes.

But Paul Senft, a Haines City businessman who chairs Swiftmud's Governing Board, said the alternative is to have the kind of expensive legal fights that occurred decades ago in the Tampa Bay area before a regional water plan took effect

"It's going to be expensive and well need public support," Senft said.

Transportation is another troublesome issue, as major routes through the area such as U.S. 27 and U.S. 192 have become increasingly congested and are in need of redevelopment, along with land-use planning surrounding them.

"The next wave of growth in the region is coming to Four Corners," said Jeff Jones, Osceola County's strategic initiatives director in charge of the redevelopment of West U.S. 192.

"There's an opportunity to plan land uses that support transit," he said, adding another challenge is to redevelop the aging corridor to help it regain its share of the tourist market.

Transportation funding, like water funding, is increasingly restricted because many governments have already tapped sales, gas and property taxes as much as they can and have scrapped transportation impact fees.

There has been some discussion of trying to establish a regional sales tax, but it's unclear how that could be implemented equitably, the group was told.

State funding is possible, but it has to be tied to a great benefit, such as job creation, Orange County Commissioner Scott Boyd said.

He said that's the strategy they're taking in the Horizon West project, which involves development of 23,000 acres along west State Road 50 in Orange County, but also affects parts of southern Lake County.

[ Tom Palmer can be reached at [tom.palmer@theledger.com](mailto:tom.palmer@theledger.com) or 863-802-7535. Read more views on the environment at <http://environmentblogs.theledger.com> and more views on county government at <http://county.blogs.theledger.com/>. Follow on Twitter @LedgerTom. "

My question for the members of the Steering Committee is how does the water supply plan discussed in the article coordinate with the Water Supply Plan that is being developed as part of the CFWI effort? Clearly these are two separate, independent efforts as currently the CFWI has not produced a draft, (nor are you close to), of your proposed water supply plan. The article quotes Paul Senft, the chairman of the SWFWMD Governing Board as indicating that approval of their plan will be necessary to prevent expensive legal fights over water supplies. What is the CFWI's response to this proposed water supply plan and implications of expensive legal battles if the public does not agree to their (whoever they are) one billion dollar plan?

As another example of an outside group taking actions that may have a direct impact on the efforts of the CFWI is an effort by the Florida DEP Office of Water Policy to change how individual water management districts handle water use permitting. Below I have included an excerpt for the Florida DEP website that briefly describes this effort.

## **"Consumptive Use Permitting Consistency**

The Department of Environmental Protection is leading a statewide effort to improve consistency in the Consumptive/Water Use Permitting Programs implemented by the Water Management Districts. The individual water management district consumptive use permitting rules, while all developed under the authority of Ch. 373, F.S., are inconsistent among the districts. While some of the differences may be based on differing physical and natural characteristics, others are the result of development of separate rules and procedures developed over time. This results in confusion for the regulated public, particularly along the border areas of the districts, and inequitable treatment of similar applicants in different districts. Additionally, the development of separate procedures and rules is costly and inefficient.

### **The Department's goals include:**

Make programs less confusing for applicants, particularly those who work in more than one District;

Treat applicants equitably statewide;  
Provide consistent protection of the environment;  
Streamline the process; and  
Incentivize behavior that protects water resources, including conservation."

One of the goals of the CFWI is one process for permit review. I am requesting that the Steering Committee clearly state how the work of the FDEP to "streamline" the permitting process will be coordinated with the CFWI's goal of one process.

I have additional concerns with regards to some of the presentations that I have read via the CFWI website. How do I formally voice these concerns in a manner that will be reviewed and answered? In general, when will the public be given an opportunity to review in detail the work of the various sub-committee teams? The team presentations are nice, but they are just summaries of their work. I want to be able to review the assumptions and underlying data.

Also, what is the formal plan for requesting comments from the public with regards to the draft RWSP that is currently scheduled for completion September 30, 2013? In the past, the SWFWMD has published a draft of their RWSP on the Internet and requested comments. After receiving comments, each comment was posted on their website complete with a detailed response from the staff at the SWFWMD. I thought this process worked very well. Public meetings are great for presenting the CFWI work to the public, but are a very poor tool for soliciting meaningful comments.

Thank you for taking the time to read my comments and questions and I look forward to submitting more detailed, technically oriented questions once reports and studies are made available for review.

Edward McDonald

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