

Central Florida Water Initiative

Toho Water Authority
Friday, January 13, 2017

Meeting Summary

(All presentations made to the Steering Committee have been posted on www.cfwiwater.com)

1. Introductions

- Steering Committee members present: Ryan Matthews (FDEP), Brian Wheeler (TOHO Water), Paul Senft (SWFWMD), John Miklos (SJRWMD), Steve Dwinell (DACS), Dan O'Keefe (SFWMMD)
- Chair Matthews introduced Stephen James as the new director of the Office of Water Policy. Mr. James will be taking over for Mr. Matthews for future CFWI Steering Committee meetings.

2. Consent Items

- The October 28, 2016 meeting summary was approved as presented.

3. Ann Shortelle gave the following funding update:

- FY 17/18 Funding Process and Schedule
 - **CFWI Preparation Schedule for Encouragement of Regional Funding**
 - Proposals Received for Consideration – 2 total
 - 1 Water conservation
 - 2 New projects (vetting process)
 - 4 Individual/non-regional projects
 - 1 Project in CFWI Regional Water Supply Plan
 - 1 Project from the 16/17 Funding Cycle requesting 2d Year Funding
 - Total Request is just over \$10 million
 - **Future Schedule**
 - Review of proposed Projects by Technical Teams to March 2017
 - Steering Committee Meeting April 2017

4. Len Lindahl gave the following Regulatory Team update

- Following Dec 2013 FDEP Guidance Memo
 - WMD coordination on pending applications
 - Review of permit duration

- Water conservation criteria

Task 1

- Reporting consumptive use data
 - Updated list of pending applications and issued consumptive use permits
 - Available on www.cfwewater.com

Task 2: Regulatory and Statutory Options

- Statutory requirements:
 1. Uniform definition of “harmful to the water resources”
 2. Single method for residential per capita water use
 3. A single process for permit reviews
 4. A single, consistent process, as appropriate, to set minimum flows and minimum water levels and water reservations
 5. Goal for residential per capita water use for each permit
 6. Annual conservation goal for each permit consistent
- FDEP published a Notice of Rule Development on December 30, 2016
- Rulemaking process runs parallel with the Regulatory Team’s work

Topic Group Coordination

Working with of CFWI Technical Teams to accomplish our goals:

- Water Resources Assessment Team
 - Coordination approved by the MOC:
 - Environmental Measures Team
 - Possibility of applying a CFWI-specific screening tool for wetlands considering type and physiography
 - Hydrologic Analysis Team
 - Modeling availability to support wetlands screening tool
 - Conservation Team
 - Uniform conservation requirements by use class
 - Landscape irrigation restrictions

Upcoming

- Continued progress on regulatory topics
 - Logistics while in Rule Development
 - Next meeting is on 1/20/17

5. Kristen Simmons gave the Conservation Team update.

- Team Objective - develop an implementation strategy to achieve more than 37 mgd
- Implementation Strategy
 - Team Objective
 - Develop
 - Implementation strategy to achieve more than 37 mgd
- Team Objective Develop Implementation strategy to achieve more than 37 mgd

Years	MGD Saved*
2010-13	0.27
2014-15	0.13
2016-17	2.50
Total	2.9**

* Includes all BMPs, both those included in the solutions document and otherwise

** This represents 44 projects for 19 utilities

- Current PWS Sub Team Activities
 - Analyzing utility survey responses
 - 29 responses / 74% of 2010 PWS demand in CFWI
 - Analyzing feedback on participation in cost-share funding
 - Conducting follow-up calls with select utilities to:
 - Clarify existing and future BMP data
 - Obtain information regarding future conservation projects
- Current Ag Sub Team Activities
 - Determining amount of water projected to be saved by 2020
 - WMDs
 - FDACS
 - NRCS
 - Non cost-share projects
 - Also working on determining amount of water saved to date
 - Continuing to update BMP cost-share matrix
- Other Self-Supply Activities
 - Focusing on identified BMPs for DSS and other sectors (CII, LRA, and PG) where applicable
 - Looking for more optimal BMPs based on actual use type
- Schedule

- June 2017 - Draft options for implementation strategies to achieve more than 37 mgd savings for MOC consideration
- December 2018 – Provide draft Water Conservation Chapter to RWSP Team

After the presentation, Mr. Dwinell noted that AG has already stepped up its conservation efforts and, therefore, future percentage reductions will be harder to obtain. Mr. Wheeler that utilities have implemented more conservation than that reported through cost-share and that more cost-share dollars equals more projects. Mr. Senft suggested that more monitoring data for AG is needed and expressed the importance of continued conservation measures. Mr. Matthews ended the discussion with the point that all of the interested parties need to continue to work together to work with the Legislature to ensure continued funding for CFWI efforts

Clair Muirhead gave the following update for the RWSP Team:

- The next meeting of the RWSP team will be a face to face meeting at the SJRWMD office in Maitland on January 25, 2017
- The BEBR contract for population projection work is being review by SWFMWD legal and should be forwarded to UF the week of January 16th
- The RWSP team is in the process of developing historic water use tables for use in preparing demand projections. In preparing these tables the team is using the groundwater data in the ECFTx model plus surface water withdrawal data submitted to the Districts.
- In regards to agricultural demand methodologies, the team is working on a white paper describing the 2 methods being investigated; the FSAID3 and AFSIRS comparison runs are complete and being reviewed. The team will present either methodology consensus or request recommendation/direction at the April Steering Committee meeting.

7. Mark Hammond gave the following update on the WRAT update:

- The HAT is still on schedule with the ECFTx groundwater model.
- DMIT provided an update to WRAT in January.
 - making good progress
 - anticipate providing update to MOC in next month or so; and,
 - update to the Steering Committee in April, possibly July
- The EMT is working on finalizing its detailed scope of work and addressing questions from the Regulatory Team

After the presentation, it was asked if the DMIT work plan is on schedule. Mr. Hammond stated that it was. While not as much was accomplished last year, he believes they are not on schedule after direction from Dr. Shortelle and Messrs. Beltran and Lindahl. The members expressed their gratitude for all of the work that has been put into the effort.

Mr. Senft stated that the projections for short-term rentals are not known and need to be studied. He asked that the subteam consider the issue in its upcoming meetings.

- *Public Comments*

Mr. David Gore, NE Polk County resident, provided oral comment, but asked that his written comments be incorporated into the meeting summary. Those comments, as provided, are incorporated below with minor formatting changes only.

David Gore written comments and questions:

Is there any way to find out names of the persons involved in interpreting the science that is being used to write the current WSP that will be used to make much more water supply available [hundreds of MGPD] without causing more harm to natural systems in the area and will also be restoring MFL's in the area?

I have been able to understand the scientific explanation of how water redrawals and the increasing drainage of more land area is causing the MFL problems but I have not been able to understand how withdrawing 40% more water from the water table and natural systems and flows and more land draining of the area will not cause any problem and will restore current problems in the area. Will this meeting be discussing the scientific details and reasoning of how that many of the things [actions] that the very costly plan promotes will accomplish the main goals of the CFWI?

If not, what will this meeting be discussing or trying to accomplish?

I am concerned because billions of dollars in costs to us are being talked about to accomplish the actions being promoted in the plan and also that the costly things being considered won't end up as wasting money and causing more loss of our natural systems.

I find the words: source, alternate, storage, and harm are being used in places or ways in the plan that portray flawed or inaccurate perceptions of the hydrology of the area and the outcomes and value of human actions described in this plan.

If the WSP people don't want hear any my comments or answer questions please pass this to someone in CFWI that provides answers to citizens' concerns to be considered in the WSP.

Another concern is the value of the Plans reliance on computer modeling that cannot differentiate or quantify changes of the water table by impacts unrelated to water withdrawals or the erratic operations of water control structures as a substantial cause and effect to the water quantity of Fla's freshwater hydrology.

1.untrue statements

The plan wrongly states that the Floridan is the source of the water we are withdrawing from it instead of identifying that the true source of the water flowing from the wells is always and only a flow of water emptying from space at the lands water table. This creates an untrue perception of the Floridan as a source of water supply instead of that it only provides an action of gathering and conveying or transporting the water flowing down from the overlying true source at the water table elevation to the well bores. The availability of water for our use from the Floridan can only be considered by the water conditions or water elevation occurring at or contained at the water table as the only true water source available.

2. ignoring some known and proven facts about the source of water flow

Include the answer above. The plan uses the idea that there are many different sources to withdraw water from that will each supply greater amounts of more water to supply growing water needs. Almost all the sources of new water as solutions that are promoted in this plan ignore the fact that they will be taking that water from the same already stressed water table elevation of our surface water natural systems we already draw from and concerned about. This plan relies on the idea that taking water from those

sources will not cause more problems and that they will also restore the current problems of less water for our natural systems. This plan ignores the fact that the source of all water flow whether natural or by human actions, the springs, streams, subterranean outflow seepage, and well or water withdrawals above or below ground any where is all only by water emptying from space at the water table elevation.

3. ignoring some known and proven facts about the water storage action

Also consider the answers above. The plan relies on the Idea that water storage action can occur within the deeper aquifers in the deeper consolidated geologic areas where no water filled space is ever emptied and refilled. This idea goes against a true well known fact that a measure of water can only enter a certain water filled space if a same measure of water exits that space or that a measure of water injected into a certain water filled space will cause an equal measure of water to exit that space. There is a very flawed and popular idea that the action of the term "recharge" of underlying deeper aquifers is indicating water storage action occurring within that aquifer instead of only the continuity of a rate of flow of water that is moving equally into through and out of those aquifers that is all coming from overlying space at the water table where all hydrological water storage action occurs. The plan relies on ASR and AR injection as creating water storage action within deep aquifers when the true facts are that that the only action that is occurring is to reroute the normal downflow of some of that water directly into the aquifer through a pipe instead of the normal route through the geologic materials that filters the water to the high quality the aquifer provides us.

The actions proposed in this plan will be relying on sound thinking and accurate information to reach the goals that have been established. The huge area of Fla's hydrology of aquifers and surface water and streams that are all connected to each other and also to the surrounding sea and big variations in climate can make it hard for us to know

if something is helpful harmful or neither or to know if an action is helping. If possible share my responses with others involved. I assure you that I will present a very clear picture of why this plan will not be accomplishing the main goals that it addresses.

Hello CFWI Officials

For the past year I have been presenting a lot of things in person and written to the CFWI effort concerning the science and how that some of the things and actions being proposed are not based on accurate facts and sound thinking. I do not know if any of the things I have presented have been considered because I have not heard any discussions about the things I have questioned and the wording of the final WSP draft appears to ignore most of the things I have brought up.

It seems like that there are persons controlling the science and methodology used to write the CFWI WSP that are steering the initiative by using some misleading ideas and words in ways that do little to accomplish the goals of the CFWI and very likely cause the problem it addresses to become even greater and huge wastes of money. I see this as a lack of care for natural systems of the area or that some key persons lack of a good understanding of some very basic facts of the hydrology of the area.

I request an opportunity to discuss the problem described above with persons who have directed the writing of the plan and promoting the solutions that are proposed.

I realize there are different interests that are affected by how that effective regulation will be used and concern for the cost of effective solutions and how things will be paid and those are the big challenges facing the CFWI.

As a person interested in the well being of flows and levels of our natural systems and quantity and quality of our water resources I am willing to help any way possible to accomplish those same interests that are also the main goals of the CFWI effort.

Will look forward to the CFWI effort resulting in more water supply available without greater loss of natural systems and to restoring the current MFL problems.

I am very disappointed that my WSP comments emailed to you 7/11/2015 that is included below were not included for consideration or record and that you chose to not inform me in any way that I might need to use another route or address to accomplish this action. As you should know I like all other persons interested in the outcome of this plan who participate want their comments included for consideration or an explanation why not. I will be attending the Oct30 CFWI meet to make sure that the subjects of my comments will be recorded and will be a factor of consideration of the steering committee who are scheduled to vote to approve the plan as written. I am expecting that the persons of science who chose the wording used to accomplish the listed goals of the plan and the CFWI will also be there.

The plan is written based on poor thinking that is ignoring certain basic proven facts of the flow and storage and gradient of water of Fla's hydrology in the CFWI area. So far this is creating flawed ideas seriously affecting the creation of positive solutions to supply more available water by promoting some worthless costly ideas as solutions that are not protective of our natural systems.

1; It creates a perception the floridan aquifer is the primary source of where our water supply comes from. This idea causes many people to think the 850 mgpd flow of water we can use is emptying from and depleting the floridan aquifer in the CFWI area. This plan is based on science that does not recognize other ongoing human actions that reduce water table levels and water availability in the CFWI area

2; It creates a wrong perception that we can use space in the floridan aquifer area to store more water in the CFWI area or that we can take more water from the floridan aquifer without causing a greater problem to our natural systems .

3; It fails to adequately recognize how critical the water containment ability of the land is as the most important factor we can effect that increase or decrease water table levels and amount of available water of the surficial water table that determines the amount of water available we have

at any given time or location to sustain natural systems and for our use. Thousands of permits are being handed out each year that are for actions unrelated to water use that are engineered to lower the water table of more CFWI land area and keep it bled down.

4; It is promoting a lot of costly solution ideas that are costly to maintain that will only result in withdrawing more water from the same stressed hydrology of the CFWI area.

This plan needs to be peer reviewed by persons knowledgeable in the physics of water, gravitational hydraulics, geologic space, and the topography of the CFWI land area relative to sea level.

- The Steering Committee unanimously agreed to hold the next meeting at the Toho Water Authority at 9:30 on April 14, 2017.
- Adjourn