



The Water Cooperative of Central Florida
Wednesday, January 6, 2016
2:00 PM
Toho Administration Building
951 MLK Boulevard
Kissimmee, FL 34741

Agenda

1. APPROVAL OF THE BOARD MEETING MINUTES FROM OCTOBER 7, 2015
2. APPROVAL OF REIMBURSEMENT OF EXPENDITURES TO DATE BY TOHO WATER AUTHORITY ON BEHALF OF THE WATER COOPERATIVE OF CENTRAL FLORIDA
3. APPROVAL OF THE SCOPE OF WORK AND FEE FOR THE WATER WHEELING RATE STUDY
4. APPROVAL OF THE SCOPE OF WORK AND UPSET MAXIMUM FEE FOR THE ALTERNATIVE MEMBRANE CONCENTRATE DISPOSAL PERMITTING EFFORT
5. CENTRAL FLORIDA WATER INITIATIVE UPDATE

Description	Regular meeting of the Water Cooperative of Central Florida. Present at the meeting were TWA Board Chairman Bruce Van Meter, Polk County Commissioner George Lindsey, Orange County Commissioner Peter Clarke, City of St. Cloud Commissioner Donald Shroyer, TWA Executive Director Brian L. Wheeler, Silvia Alderman, WCCF Counsel and Executive Assistant Nilsa C. Diaz.		
Date	10/07/2015	Location	Tohopekaliga Water Authority Board Room
	ITEM	NOTES	
2:00 PM	MEETING CALLED TO ORDER	Chairman Van Meter called the meeting to order at 2:00 PM.	
	1.APPROVAL OF THE BOARD MEETING MINUTES FROM JULY 8, 2015	<p>Mr. Brian Wheeler asked to amend the Agenda to include Item 5-Schedule of Meetings for 2016. Board member Lindsey moved for addition of Item 5 to the Agenda and Board member Shroyer seconded the motion. Motion passed 3 to 0.</p> <p>Board member Lindsey moved for approval of the Agenda as amended. Board member Shroyer seconded the motion. Motion passed 3 to 0.</p>	
	2.APPROVAL OF REIMBURSEMENT OF EXPENDITURES TO DATE BY TOHO WATER AUTHORITY ON BEHALF OF THE WATER COOPERATIVE OF CENTRAL FLORIDA	<p>Mr. Brian Wheeler, Executive Director for the Toho Water Authority, summarized the expenditures TWA made on behalf of the Water Cooperative of Central Florida (Water Cooperative) during the past quarter (July – Sept.) submitted for reimbursement. The total amount of expenditures was \$40,246.75. Board member Lindsey moved for approval of the reimbursement to TWA and Supervisor Shroyer seconded the motion. Motion passed 4 to 0.</p>	
	3.APPROVAL OF THE WATER COOPERATIVE OF CENTRAL FLORIDA FINAL BUDGET FOR FY2016	<p>Brian Wheeler, Executive Director for Toho Water Authority (TWA), stated that at the July 8, 2015 meeting the proposed FY2016 draft budget was submitted to the Board of Supervisors for approval. Mr. Wheeler explained that the draft budget for FY2016 contained the same line items as the FY2015 budget with the exception of the deletion of the line item for project management expenses for the Cypress Lake Alternative Water Supply Project. This line item was removed from the expenditure portion of the budget because the extended time period for the projected implementation of the project has made this proposed expenditure unnecessary for the next year. Following approval of the draft budget proposal, the budget was submitted to the member governments for comment. No comments were received from the member governments. The FY2016 Budget is now ready for approval for the fiscal year by the Board of Supervisors. Board member Lindsey moved for approval of the draft Budget FY2016 and Supervisor Shroyer seconded the motion. Motion passed 4 to 0.</p>	

	4. STATUS REPORT ON THE NEXT STEPS FOR THE CYPRESS LAKE ALTERNATIVE WATER SUPPLY PROJECT	At the April Board Meeting, staff reviewed and recommended the next steps for implementation of the Cypress Lake Alternative Water Supply (AWS) project. At the July meeting, the decision was made to proceed with retaining the services of a consultant to assist in the development of the water wheeling rates and charges for water wheeling. The second amendment to the interlocal agreement for the preliminary engineering for the project will use funds remaining from the preliminary engineering work for the water wheeling rate development. It is anticipated that the contract for the water wheeling work will be available for the January meeting. Work is proceeding on the development of a scope of work and contract to work with FDEP on the potential membrane concentrate disposal alternative. No action is required by the Board, this is just a report on the progress of the project.
	5. SCHEDULE OF MEETINGS FOR 2016	Mr. Wheeler explained that the Board needs to establish the schedule of meetings for 2016 and asked if the Board needed to modify any of the dates before the schedule was advertised. Board member Shroyer said that he will be out of town on the proposed July 6th meeting date. The Board agreed by consensus to change the date to July meeting date July 13, 2016. Board member Shroyer moved for approval of the Schedule of Meetings for 2016 and Board member Clarke seconded the motion. Motion passed 4 to 0.
	BOARD MEMBER COMMENTS	Silvia Alderman, Counsel for the Water Cooperative, summarized the actions of the Central Florida Water Initiative (CFWI) Regulatory Team since the April meeting. Ms. Alderman gave a PowerPoint presentation and fielded questions from the Board. The regional water plan will be approved on October 30 th by the CFWI Steering Committee and then submitted to the Water Management Districts for approval at their November meetings.
2:32 PM	ADJOURNED	There being no further business to come before the Board, Chairman Van Meter adjourned the meeting at 2:32 PM. _____ Bruce R. Van Meter, Chairman _____ Peter Clarke, Secretary ncd

CATEGORY: Water Cooperative of Central Florida

Attachments: Itemized list of expenditures by Toho Water Authority from October 8, 2015 – December 8, 2015)

APPROVAL OF REIMBURSEMENT OF EXPENDITURES TO DATE BY TOHO WATER AUTHORITY ON BEHALF OF THE WATER COOPERATIVE OF CENTRAL FLORIDA

Explanation: The Board of Supervisors adopted a resolution at the October 2, 2013 meeting authorizing the reimbursement of expenses incurred by Toho Water Authority (TWA) on behalf of the Water Cooperative on a quarterly basis. The resolution allows the Authority to submit a detailed list of expenses incurred each quarter to the Board for approval for reimbursement. Under the resolution, the TWA could be reimbursed quarterly during the year instead of once annually as was done for the previous fiscal year. The attached list of expenditures, made to date by TWA on behalf of the Water Cooperative, is being submitted for approval for reimbursement contingent upon the Board approving the authorizing resolution.

Recommendation: Staff recommends approval of the list of expenditures submitted to date for reimbursement to the TWA.

Reimbursement TWA expense.01.06.2016 blw

Attachment to Item 2

Toho Water Authority List of Expenditures on behalf of the Water Cooperative of Central Florida (October 8, 2015 – December 8, 2015)

Vendor	Date	Invoice	Amount
Akerman LLP	10/08/2015	9067318	\$130.00
Akerman LLP	10/08/2015	9067320	\$14,016.34
FL Dept. of Economic Opportunity	10/01/2015		\$175.00
Akerman LLP	11/04/2015	9073394	\$12,044.33
Akerman LLP	11/04/2015	9073395	\$1,901.59
Akerman LLP	12/08/2015	9082516	\$1,712.93
			\$29,980.93

CATEGORY: Water Cooperative of Central Florida

Attachments: Raftelis Scope of Work

April 2015 Agenda Item – Cypress Lake Project Next Steps

Approval of a Consultant Contract and Scope of Services Proposal with Raftelis Financial Group for the Cypress Lake Infrastructure Cost Allocation Study

Explanation: At the October 2015 meeting, the Board was informed that an RFQ had been advertised on August 3, 2015 for services of a qualified firm to assist in the development of a cost allocation and finance model to provide the basis for the development of rates for the partners charging each other for the “wheeling of water” between the parties. Statements of qualifications were received from three firms and the selection committee composed of representatives from each of the partners met on October 21, 2015 to review and evaluate the submittals and firms. Statements of Qualifications were received from three entities: Raftelis Financial Consultants, Burton & Associates, and Willdan. Based on qualifications and the demonstration of project understanding, the Committee selected Raftelis to provide services for the cost allocation study.

A proposal in the amount of \$148,860.00 has been negotiated with Raftelis and is within the Cooperative’s allocated project budget of \$150,000. The Cooperative funding for the Cypress Lake Transmission and Distribution water wheeling study was originally approved by individual participants in the original Interlocal agreement. The Second Amendment to the Interlocal Agreement, subsequently approved by the participants, including the TWA Board of Supervisors on July 22, 2015, reallocated remaining funds to the cost allocation study. As the project administrator, TWA is responsible for contracting with, and issuing a purchase order to, the selected consultant. TWA will be reimbursed each participant’s proportional share of the project cost after payment of each Consultant invoice. The Cypress Lake water allocation defines the funding responsibility of each participant.

Recommendation: Staff recommends approval of the Contract and Proposal with Raftelis in the amount of \$146,860.00 on behalf of the Cooperative and RCID.

Approval of Consultant Contract 01-06-2016.blw

The Water Cooperative of Central Florida and Reedy Creek Improvement District

Scope of Services for Cypress Lake Wheeling Rate Study

Objectives

The Water Cooperative of Central Florida (WCCF) consists of Toho Water Authority (TWA), City of St. Cloud, Orange County, and Polk County. The Cooperative together with the Reedy Creek Improvement District (collectively referred to herein as the “WCCF/RCID”) is undergoing planning, design, construction, and operations of the Cypress Lake Well field as an alternative water supply to meet long term water demand projections. While the development of the Cypress Lake Well field project is a long-term goal, the WCCF/RCID desires to potentially delay the implementation by utilizing existing water supplies in an optimal manner by wheeling water among the various utilities based on each utilities’ supply and demand characteristics (short-term goal).

A conceptual design report has been completed to assist the WCCF/RCID in planning for wheeling of water in anticipation of the Cypress Lake Well field project. With the completion of the conceptual design report, the Water WCCF/RCID is seeking the development of a Wheeling Cost Allocation Study to identify cost apportionment and rate development associated with the Cypress Lake Well field and associated transmission projects.

At the request of the WCCF/RCID, Raftelis Financial Consultants, Inc. (RFC) with The Louis Berger Group, LLC (LBG) (referred collectively as the “RFC Team”) has developed a scope of services that is designed to:

1. Engage the WCCF/RCID to gain an understanding of expectations and concerns with regard to cost allocation methodologies;
2. Develop cost allocation and wheeling rate options for consideration;
3. Develop a dynamic Wheeling Cost Allocation Model to identify and evaluate various scenarios and variables; and
4. Present the results and conclusions to the WCCF/RCID.

To achieve these tasks and the scope of services herein, the following working groups are identified as integral elements to the project execution:

Executive Team: This group includes the designated project representatives from each of the five WCCF/RCID utilities. Meetings with the Executive Team will consist of project review, project direction/guidance, and consensus building.

Project Managers: This group includes technical representatives designated from each utility to review and collaborate on technical aspects of the Wheeling Cost Allocation Model including model review, data verification, scenario analysis, and project update meetings.

WCCF/RCID Project Administrator: The individual assigned as the primary contact between the RFC Team and the WCCF/RCID for purposes of project coordination, scheduling, routine correspondence, and invoicing.

RFC Team: The RFC team includes senior RFC managers, RFC staff consultants, and LBG engineers to assist with engineering aspects related to developing the cost allocation and Wheeling Cost Allocation Model.

Scope of Services

Task 1: Project Management and Project Initiation

- 1.1 Project Management will include project scheduling, communication, QA/QC, invoicing and overall project coordination. This task will occur for the duration of the project.
- 1.2 Develop a data request list to be submitted to the WCCF/RCID Project Administrator for distribution and collection of data necessary for the project. As part of this task the RFC Team will coordinate with Reiss Engineering on any data clarification or questions prior to the meeting set forth in Task 2. A partial list of data requirements includes:
 - Interlocal agreements
 - Planning documents
 - Engineering reports
 - Demand projections
 - Existing utility asset data
- 1.3 After reviewing all available documents related to the Project, The RFC Team will conduct a joint meeting with the Executive Team and Project Managers to gain a full understanding of the project and goals for allocating the costs as well as known issues that may occur in the allocation of costs and operation of the facilities.

Deliverables:

- Data request
- Kick-off meeting materials and follow up

Task 2: Meet with Project Managers and Consulting Engineers

The RFC Team will conduct an initial technical meeting with the Project Managers and Consulting Engineers (Reiss Engineering) to discuss the Cypress Lake Well field transmission project dynamics, data requirements, cost estimates, etc. Review the water wheeling capabilities of the project and participants based on anticipated demands. Review proposed construction schedule from initiation to build out and timing of water supply surplus and demands by partners. Also, gain an understanding of the proposed facilities and associated operating and production costs.

Deliverables:

- Meeting agenda
- Meeting minutes

Task 3: Cost Allocation Review

Based on the understanding gained in the previous tasks, the RFC Team will provide an overall briefing document to the Executive Team and Utility Project Managers that includes:

- 3.1 A discussion/summary of cost allocation methodologies and rate design options that could be used to allocate capital costs including pros and cons of each method. This will include research and discussion on how other entities in a similar situation have developed cost allocations. Based on our experience with setting wheeling rates for entities and for transitioning from wheeling to wholesale arrangements, consideration should be given to individual wheeling rates versus a postage stamp approach, how to avoid stranded capacity should a member of the WCCF/RCID find alternative water sources, etc. The focus will be conceptual designs regarding cost allocation for both the short-term (wheeling of water) and long-term (selling wholesale water) to ensure an effective transition from the short-term to long-term approach.
- 3.2 A review of associated operational procedures necessary for allocation methods discussed. This will include proposed methods for facility operation and collection of data for allocation methods proposed.
- 3.3 Identification by LBG in cooperation with the Project Managers and Consulting Engineers of any additional capital that may be needed to track flows or other data and discuss how they will be incorporated into the model. This may involve various metering/SCADA options / locations / cost estimates for multiple scenarios. One

scenario could include wheeling water back and forth between member agencies of the WCCF/RCID until a regional plant is built. Another scenario could include a conversion to permanent wheeling from the new plant to member agencies of the WCCF/RCID assuming some water may flow thru one or more agencies to get to final users systems.

- 3.4 Recommended ranking of rates structures and/or cost allocation methods for operating the system from initial production date to build out. Include pros and cons of each.
- 3.5 List and discuss all cost sharing arrangements recommended between all participants and any between specific participants.
- 3.6 The RFC Team will meet with the Executive Team to discuss the briefing document and select cost allocation methodologies/rate designs options to be considered as the basis of allocating anticipated costs.
- 3.7 WCCF Board Briefing: RFC will provide a brief summary to the WCCF Board regarding the project status, schedule, and project direction to date

Deliverables:

- Executive Team briefing document
- Meeting summary/minutes
- WCCF Board summary

Task 4: Wheeling Cost Allocation Model

Prepare a data request list to populate up to three cost allocation methodologies/rate design options approved by the participants.

- 4.1 Prepare a data request list for any additional data that will be required to develop the preliminary Wheeling Cost Allocation Model.
- 4.2 Coordinate individually with the finance team for each utility in order to develop funding options by phase. Funding options would consider the timing of projects, potential debt instruments, and similar funding terms.
- 4.3 Create and provide a detailed Wheeling Cost Allocation Model. Model considerations will include short and long-term considerations, average and peak daily water demand requirements; hydraulic peaking requirements; debt service analysis/allocation; existing asset utilization; operational configuration; metering and billing determinants. Importantly the model will identify various utilization scenarios

and will be used to optimize allocation options with consideration of Phase 1 and identify all inputs necessary for the model to function.

- 4.4 The RFC Team will meet with the Project Managers to review the preliminary model functionality and verification of data sources.
- 4.5 Develop any model modifications and provide a detailed description of the model operation and allocation methodologies.
- 4.6 Second model technical review meeting with Project Managers.
- 4.7 Provide model documentation and meet with Executive Team to review model functionality, assumptions, and preliminary results.
- 4.8 Finalize methodology: create and finalize an agreed upon methodology for allocating capital and operational costs of the project.

Deliverables:

- Additional data request list
- Project Managers meeting agenda and minute notes
- Preliminary Wheeling Cost Allocation Model
- Executive Team meeting read-ahead material and meeting summary/minutes

Task 5: Report

Prepare a draft report including the cost allocation methodologies/rate designs evaluated and approved by the Executive Team.

- 5.1 Receive comments from the Executive Team and Project Managers and incorporate into draft report.
- 5.2 The RFC Team will meet jointly with the Executive Team and Project Managers to present findings of report. This includes development of an executive summary level report and a PowerPoint presentation.
- 5.3 Provide briefing to the WCCF Board regarding the project scope, status, and preliminary findings.
- 5.4 Issue the final report and executive summary PowerPoint presentation to Executive Team participants.

5.5 Present final report to WCCF Board for adoption.

Deliverables:

- Draft and Final Report
- PowerPoint Presentation

Task 6: Model Documentation and Delivery

- 6.1 Provide the Wheeling Cost Allocation Model in a non-proprietary Excel-based format.
- 6.2 Document instructions on model modifications, input areas, and scenario analysis.
- 6.3 Host a 2 hour on-site training session on the Wheeling Cost Allocation Model.
- 6.4 Provide model support for three months after delivery to include any minor modifications necessary to ensure full functionality.

Deliverables:

- Final Wheeling Cost Allocation Model and User Instructions

Schedule

Assuming notice-to-proceed by January 27, 2016, the proposed project schedule is reflected as follows:

Projected Completion:

Task 1: February 2016

Task 2: February 2016

Task 3: April 2016

Task 4: August 2016

Task 5: Draft report - September 2016; Final Report - November 2016; WCCF Board presentation - January 2017

Task 6: January 2017

Compensation

For the professional services set forth in this Scope of Services, TWA shall compensate the Consultant a lump sum fee for Task 1 – 6 on a percent completed basis as follows:

	Total Cost
Task 1 - Project Management and Project Initiation	\$28,480
Task 2 - Meet with Project Managers and Consulting Engineers	\$11,820
Task 3 - Cost Allocation Review	\$35,960
Task 4 - Wheeling Cost Allocation Model	\$44,960
Task 5 - Report	\$18,460
Task 6 - Model Documentation and Delivery	\$9,180
Total	\$148,860

ATTACHMENT TO ITEM 3: AGENDA ITEM FROM APRIL 2015

CATEGORY: Water Cooperative of Central Florida

Attachments: None

Recommended Next Steps for the Cypress Lake Alternative Water Supply Project

Explanation: At the January 2015 meeting staff reported that the Preliminary Engineering phase of the Cypress Lake Alternative Water Supply Project is complete. Additionally staff recommended retaining the services of a consultant to assist in the development of a cost and rate model/formulas for assessing the costs between cooperative members for the construction of improvements recommended in the Water Wheeling Study for transmitting and sharing water between the member agencies. Since the last board meeting the project representatives and other staff from the member agencies have met to develop the “next steps” in developing the Cypress Lake AWS Project. The staff project team consisting of representatives from each of the member agencies is recommending three tasks for the “next steps”:

1. Development of a cost and rate model/formulas for Water Wheeling
2. Acquisition of the property for the well sites, water treatment plant site and where appropriate easements for the water transmission mains.
3. Construction of a deep well injection test well for the disposal of the waste concentrate from the membrane treatment to be employed at the water treatment plant.

The construction of the deep well injection test well has the longest lead time of the three steps for implementation and is a critical step to finalize the location of the water treatment plant and the feasibility of the project. The consultants for the preliminary engineering phase of the project estimated the construction and testing of the test well could take 18-24 months from the beginning of construction. The test well would be constructed at a depth significantly below the Lower Floridan Aquifer into what is known as the “boulder zone” , 3,000 to 4,000 feet deep or more. The cost of the test well could be in the range of \$5 million or more depending upon the actual depth of construction required. Should the board authorize the property acquisition step as recommended, the water treatment plant site acquisition would not be finalized pending the satisfactory completion of the deep well injection test well. An option to purchase the property for the water treatment plant would be sought with the ability to close on the property if the well is successful but the ability also to abandon the purchase if the well is not successful. If the construction of the test well is not successful a second well would have to be constructed in a new location to be able to find an appropriate location within the “boulder zone” to discharge the membrane treatment concentrate.

There is remaining in the Interlocal agreement for the preliminary engineering phase of the project approximately \$1 million. This should be adequate funding for the first two tasks of the “next steps”, the Water Wheeling rate and cost work and the property acquisition. However the existing contract amount will not cover the deep well injection test well construction. To implement these recommended “next steps” including the deep well injection test well will require an amendment to the Interlocal agreement for the preliminary engineering and the commitment of additional funds from the member agencies. The drafting and approval of the amendment to the Interlocal agreement could be completed this year and work initiated on the first two tasks however the work on the test well could not be initiated until after the new fiscal year as the member agencies will have to budget and commit the additional funds for the test well construction tasks.

If the Board approves the staff recommendation, an amendment to the preliminary engineering Interlocal agreement will be drafted by the Water Cooperative counsel for Board action at the July meeting. The Interlocal agreement would then require approval of each of the member agency boards before it could become effective. With the Board approval to initiate the “next steps” the member agencies could incorporate the associated costs into their respective FY2016 budgets.

Recommendation: Staff recommends that the Water Cooperative Board approve the next step for the Cypress Lake Alternative Water Supply Project as submitted and the development of the associated amendment to the preliminary engineering Interlocal agreement for Board action.

CYPRESS LAKE AWS NEXT STEPS APRIL 2015 BLW

CATEGORY: Water Cooperative of Central Florida

Attachments: Memorandum on November meeting with FDEP

July 8, 2015 Agenda Item for Approval of Second Amendment to the Cypress Lake Project Interlocal Agreement

APPROVAL OF THE SCOPE OF WORK AND UPSET MAXIMUM FEE FOR THE ALTERNATIVE MEMBRANE CONCENTRATE DISPOSAL PERMITTING EFFORT.

Explanation: Water Cooperative representatives have been working on developing a scope of work with Tetra-Tech for the permitting of the injection of membrane concentrate into the lower portion of the Lower Floridan Aquifer as an alternative to concentrate disposal through a deep injection well. The scope of work and proposed fee were proceeding to completion when FDEP proposed meeting to discuss the proposed the permitting of the proposed concentrate disposal alternative on November 22, 2015. A memorandum summarizing the outcome of the meeting is attached. Based on the results of the meeting the scope of work has been undergoing revision. The proposed fee for the permitting will be within the originally proposed budget of \$150,000.

The draft scope of work will be provided along with additional information for this request in an updated agenda item on Monday January 4th.

Staff is requesting the Board's approval of the draft scope and upset maximum fee at this January meeting to authorize the permitting work to begin instead of waiting till after the April Board meeting.

Recommendation: Staff recommends approval of the scope of work and an upset maximum fee of \$150,000 with Tetra-Tech for the permitting effort for the alternative concentrate disposal and authorizing the execution of the addendum to the consultant's contract upon final negotiations.

Approval of Consultant Contract 01-06-2016.blw

Memo

TO: BOARD OF SUPERVISORS

FROM: BRIAN L. WHEELER

**CC: MARJORIE CRAIG, POLK COUNTY UTILITIES
KEVIN FELBLINGER, CITY OF ST. CLOUD
TERESA REMUDO, ORANGE COUNTY UTILITIES**

DATE: DECEMBER 29, 2015

**RE: CYPRESS LAKE ALTERNATIVE WATER SUPPLY PROJECT -
CONCENTRATE DISPOSAL – FDEP MEETING**

On November 23, 2015, representatives of the Water Cooperative and the Florida Water Environment Association Utility Council (FWEAUC) met with representatives of the Florida Department of Environmental Protection (FDEP) to discuss the potential for permitting concentrate disposal in an Underground Source of Drinking Water (USDW) within the lower portion of the Lower Floridan Aquifer within Central Florida and more specifically for the Cypress Lake Alternative Water Supply (AWS) project. The FWEAUC proposed this alternative permitting concept of concentrate disposal for membrane treatment systems to the FDEP in early October 2015 at a meeting with representatives at their headquarters. Typically, reverse osmosis (RO) concentrate disposal has only been allowed in an aquifer containing greater than 10,000 mg/L below the base of the lowermost USDW at a site, therefore, this approach represents a change in regulatory strategies for concentrate management. Following introduction of the concept in October, FDEP proposed a more detailed meeting in November with representatives of their Underground Injection Control (UIC) permitting group in Tallahassee to explore the potential further. Those attending the November meeting representing the Water Cooperative included Brian Wheeler (Toho Water Authority and President of FWEAUC), Marjorie Craig (Polk County Utilities), Mark McNeal (ASRus, LLC, sub consultant to Tetra-Tech), Mike Weatherby (HydroGeo Consulting, LLC, sub consultant to Tetra-Tech) and Chuck Drake (Tetra-Tech). FWEAUC was also

represented by David Childs and Eric Olsen of Hopping Green and Sams, legal counsel and lobbyist for the FWEAUC. Representing FDEP UIC was Cathleen McCarty and Joe Haberfeld.

At the meeting Brian Wheeler and Marjorie Craig provided a brief overview of the meeting topic and summarized the October presentation, setting the stage for the meeting. Mark McNeal and Mike Weatherby then gave a brief presentation illustrated with some handouts of the potential for disposal of membrane treatment concentrate within a permeable zone in the Lower Floridan Aquifer (LFA) designated as a USDW. The importance of using the lowermost LFA permeable zones for concentrate disposal in central and northern Florida was emphasized to allow many prudent AWS projects to move forward. Joe Haberfeld of FDEP provided the following guidance for the concept:

FDEP was open to the potential for permitting concentrate disposal within the lower permeable units of the LFA, such as those previously characterized during deep subsurface evaluations in Central Florida for the Cypress Lake AWS and Polk County SE well field. The agency's position on the permitting of concentrate disposal was evolving based on the necessity for concentrate disposal alternatives for Central Florida and other areas of the state. FDEP would approach permitting concentrate disposal within the lower LFA similar to its present approach to aquifer storage and recovery and other Class V injection systems within the LFA.

An injection well for concentrate disposal within the lower permeable zone of the LFA, if permitted, would be permitted as a Class V, Group 4 disposal well under FDEP regulations. Class V, Group 4 wells include wells designed as "Desalination process concentrate wells" that do not otherwise qualify as Class I Industrial injection wells because they either inject directly into a USDW or may cause fluid to migrate into a USDW.

Issues that would have to be addressed in a permit application should include the following:

- A. Injection Zone is not now or is not reasonably expected to serve as a source of public water supply. The zone could have the potential for use as a drinking water supply if it could be demonstrated that any contaminants could be removed by reverse osmosis.
- B. There is a concern that the concentrate disposal will concentrate radionuclides to a level that would exceed the background levels of the permeable unit utilized for disposal with the LFA. Radionuclides are typically the primary contaminant of concern in membrane concentrate

as naturally occurring radionuclides are effectively concentrated up in the RO waste stream. If that is the case the application may require an application for a Water Quality Criteria Exemption (WQCE) for radionuclides (Gross Alpha and Radium 226/228). Each parameter exemption requires a \$6,000 fee and an exemption for all radionuclides would be considered as a single parameter. Other drinking water parameters may require an application for a WQCE based on the actual level of the parameter within the area of the concentrate disposal and the concentration of the parameter within the concentrate.

- C. FDEP would look into the use of a zone of discharge (ZOD) for these concentrate disposal well(s) and the potential to demonstrate institutional control. For example institutional control could be demonstrated by showing that the concentrate disposal would remain within a geographic area and within a permeable unit that the property owners were not reasonably expected to utilize as a drinking water source. Compliance points for primary drinking water standards would be near the property boundary and within an overlying permeable unit which is reasonably expected to serve as a drinking water source. In the instance of the Cypress Lake AWS project, the disposal wells would be located on agricultural property outside the county urban surface area where the LFA is unlikely to be utilized for a drinking water source by the property owner(s). FDEP would prefer to use the ZOD rather than a WQCE regulatory approach if it is appropriate for the project.
- D. FDEP would request support from the Water Management Districts in considering the permitting of the lower portion of the LFA for concentrate disposal. FDEP requested that the WMDs provide a letter of support for the FDEP permitting to encourage the AWS development. Mr. Haberfeld suggested that the FWEAUC or the Water Cooperative Board may want to take on this initiative to obtain letters from the SFWMD, SWFWMD, and the SJRWMD.
- E. The potential permitting strategy would require a monitoring well system to confirm that the concentrate disposal does not migrate up into the upper portion of the LFA and does not migrate laterally outside of the described and permitted zone of discharge.

In summary the FDEP expressed an openness and willingness to receiving an application for a test well to further explore the potential for concentrate disposal within a USDW in the lower permeable zone(s) of the LFA and outlined the potential conditions that would have to be met to obtain a permit for a concentrate disposal well in the LFA. If favorable subsurface conditions are encountered, the exploratory well could be completed as a Class V, Group 4 injection well and the monitoring wells could be constructed under the Class V permit issued.

FDEP Concentrate Disposal Meeting 01.06.2016 blw

ATTACHMENT ITEM 4: AGENDA ITEM FROM JULY 8, 2015

CATEGORY: Water Cooperative of Central Florida

Attachments: April 2015 Agenda Item for Cypress Lake AWS Next Steps

Second Amendment to the Interlocal Agreement between the Water Cooperative of Central Florida and Reedy Creek Improvement District relating to the Preliminary Design and Permitting of the Alternative Water Supply Project known as Cypress Lake Well field and Related Matters

APPROVAL OF THE SECOND AMENDMENT TO THE INTERLOCAL AGREEMENT FOR THE PRELIMINARY DESIGN AND PERMITTING OF THE CYPRESS LAKE PROJECT

Explanation: The Board of Supervisors is requested to approve the Second Amendment to the Interlocal Agreement for the Preliminary Design and Permitting of the Cypress Lake Well field project. The Second Amendment requires approval by individual member agencies in addition to the Water Cooperative Board of Supervisors. The Amendment establishes and allocates funding for Phase III of the Cypress Lake Project Preliminary Design work by redirecting uncommitted funding from Phase II to Phase III and redirecting previously approved committed funding from the First Amendment to Phase III. The Second Amendment also reduces the total funding obligation of the participating parties as defined in the original Interlocal Agreement.

At the April 1, 2015 meeting of the Water Cooperative Board of Supervisors, staff reviewed and recommended the next steps for implementation of the Cypress Lake Alternative Water Supply (AWS) project (agenda item from April meeting attached).

Following the meeting, staff and the Cypress Lake AWS project team worked with the Cooperative's Counsel to develop a Second Amendment to the project Interlocal Agreement to provide funding for the next steps outlined at the April meeting. Based on the recommendations presented to the Board in April, Counsel has prepared the Second Amendment with one change. Since the anticipated cost of the design and construction of the deep injection test well for concentrate disposal is estimated at \$15 million, the project team explored alternatives to the construction of the test well. Before committing to the construction of the deep injection test well the project team is recommending pursuing a potentially lower cost alternative for concentrate disposal within the lower portion of the Lower Floridan Aquifer. This work is identified in the Second Amendment as Phase III Stage 3.

The Second Amendment identifies the Phase III work as follows:

- Stage 1: Cost Allocation Methodologies and Rate Designs. A Financial Consultant will assist with the development of project cost allocation methodologies and rate designs that will provide an equitable cost sharing and recovery arrangement for the participants as they relate to the water wheeling/transmission system portion of the Project. (Total Estimated Cost: \$150,000)
- Stage 2: Appraisals, Surveys and Related Legal Services. Various consultants will assist with appraisals and surveys for sketches and legal descriptions of twelve well sites, raw water main easements, and a site for location of the Water Treatment Facility. Legal services will be required to assist with preparation of documents for purchases of property or easements, acquisition of property options, or other property acquisition related services. (Total Estimated Cost: \$450,000)
- Stage 3: Permitting and Data Development to Support Permitting. Consultants will assist with data development and interact with permitting agencies to develop strategies for permitting water treatment reject concentrate disposal options.
- Permitting efforts will be initiated if appropriate. (Total Estimated Cost: \$150,000)

A total of \$927,939 of previously approved but as of yet unencumbered funding remains. The First Amendment, approved on May 29, 2014, reallocated \$300,000 of the \$927,939 funding from the Phase II Part A & Part B Project Management and Administration Consulting Services and transferred the responsibilities to Toho Water Authority with a provision for reimbursement. Until the project enters the final design and construction phase, the \$300,000 funding will not be needed and can be reallocated to the Phase III tasks as defined in the Second Amendment. The Second Amendment redirects \$750,000 of the First Amendment committed funding and uncommitted funding from the Interlocal Agreement to this work.

In addition to the reallocation of funding, the Second Amendment reduces the total committed funding as documented in the Interlocal Agreement for Phase II Parts A & B (preliminary design of the Water Treatment Facility and Wellsites; and the Water Wheeling Study respectively). Phase II Part A allocates funding responsibility by water allocation percentage as documented in the Water Use Permit; Part III will utilize this same funding formula. The Phase II Part B funding used a different formula with each entity committed to 50% of the project funding divided among the five participating entities and the remaining 50% funding responsibility based on the water allocation percentage. Because of this distribution, the total committed funding in Part B skewed the amount of each parties' remaining funding available for Phase III; TWA will commit all, and Orange County will commit most, of their remaining funding obligation to Phase III while Polk

County, City of St. Cloud, and Reedy Creek will have outstanding committed funding that can be eliminated. The overall funding obligation reduction is \$177,939 (\$927,939 – 750,000). Funding for future tasks will require additional amendments to the Interlocal Agreement.

Recommendation: Staff recommends approval of the Second Amendment to the Interlocal Agreement for the Preliminary Engineering and Permitting of the Cypress Lake Well field project.

Second Amendment to the Cypress Lake Interlocal Agreement.07.08.2015.db

The logo graphic consists of a dark blue square background. Overlaid on this are several geometric shapes: a red square in the lower-left, a blue square in the upper-right, and a grey triangle pointing downwards from the top edge of the blue square. The word "Akerman" is written in white, sans-serif font at the bottom of the red square.

Akerman

CFWI Reg Team Update

Silvia Alderman

January 2016



Where do we go from here?

- The Regulatory Team has been looking at next steps after adoption of the CFWI RWSP.
- The Team, which seems to have attracted quite a following, created a subteam to review the requirements to the Water Bill and priorities for the CFWI.
- The subteam met and provided a list of priorities to the Reg Team.
- After some deliberation, the Reg Team developed a list of 9 topics that it would pursue, 8 of which would result in a direct work product from the Reg Team in the form of draft rules.
- The ninth topic is the creation of a single permitting model tool that other teams would prepare with input from the Reg Team with regard to implementing regulations.



Reg Team priorities

Selected Topics and Topic Chairs

- Conditions for issuance - SJRWMD
- Uniform definition of harm - FDEP
- Uniform demand calculation by use class – Utility / Ag
- Uniform conservation requirements calculation by use class – Utility / Ag
- Use of MFLs and reservations in the permitting process - FDEP
- Single permitting model tool – SFWMD / HAT
- Permitting thresholds - SFWMD
- Permit compliance - SWFWMD
- Addressing potential impacts outside of the CFWI boundary - SJRWMD



Protocol for topic development

- Topic Chairs will be identified from the agencies/entities listed.
- The two topics not chaired by agencies will be co-chaired by the two main user groups: utilities and agriculture.
- Each Topic Chair will be responsible for collecting comments from agencies and stakeholders and developing a straw man for his/her assigned topic to bring back to the Reg Team for vetting and further development.
- The Reg Team will present the straw man drafts to the Steering Committee, which will review and forward for rulemaking as appropriate.
- Scheduling: The straw man drafts are expected to be reviewed by the Reg Team sometime in February.



A collateral topic: smart irrigation

- Parallel to the process of the priority topics, the Reg Team has appointed a subgroup to study and make recommendations on the use of smart irrigation technologies.
- The initial thrust has been to review how each district handles water restrictions. Inconsistencies have been identified.
- The next step will be to evaluate how smart irrigation technologies might be integrated with water restriction regulations and how compliance might be monitored.
- Technologies have been studied by SJRWMD and the subgroup will be hearing a report of a 5-year study that evaluated soil sensors and ET technology in varying soil types.
- It is anticipated that St. Johns will take the lead in developing regulations in this topic area.



What is STOPR+2 doing with regard to the next steps?

- STOPR+2 will meet immediately following today's Board of Supervisors meeting to develop positions on the key issues.
- This information will be provided in appropriate manner to the Topic Chairs and will be advocated in stakeholder discussions with the agency staff and CFWI Steering Committee.



Where is the water bill?

- Largely unchanged from what I reported at the last meeting.
- Has already sailed through several committees.
- Expected to pass the first week of the legislative session.
- Still requires a single set of rules to be adopted by DEP with:
 - ✓ uniform definition of the term “harmful to the water resources;”
 - ✓ method for calculating residential per capita water use;
 - ✓ process for permit reviews;
 - ✓ consistent process, as appropriate, to set minimum flows and minimum water levels and water reservations;
 - ✓ goals for each CUP: residential per capita water use and conservation.

Central Florida Water Initiative

Next Steps – Implementation
Post – Regional Water Supply Plan Approval
Wednesday, January 6, 2016

CFWI - Next Steps

The CFWI Regional Water Supply Plan was approved by the CFWI Steering Committee on October 29th and by all three Water Management Districts in November:

- ❑ SJRWMD – November 10th
- ❑ SFWMD – November 12th
- ❑ SWFWMD – November 17th

CFWI Next Steps

The Steering Committee approved four resolutions at the October 29th meeting providing guidance for the next steps:

I. Motion

The CFWI Steering Committee endorses the 2015 CFWI Regional Water Supply Plan including the Solutions Strategies and associated appendices and encourages the Governing Boards of the SJRWMD, SWFWMD and SFWMD approval of these Plans at their next meeting.

II. Motion

The CFWI Steering Committee directs the Conservation Sub-team to continue the effort to advance conservation beyond the estimates established in the Regional Water Supply Plan.

III. Motion

The CFWI Steering Committee moves to update the water supply projections and the East Central Florida Transient model within two years, and requests that the Management Oversight Committee provide options for updating the Regional Water Supply Plan at the next Steering Committee Meeting.

IV. Motion

The CFWI Steering Committee directs the CFWI Regulatory Team to develop a consistent rule framework for the region that recognizes the water resource challenges of the area.

CFWI Next Steps

The Management Oversight Committee is proposing revisions to the Guidance Document, Governance Structure, and Committees for the next phase.

The revised structure and draft guidance document will be submitted to the Steering Committee for approval at a January 29th meeting.

After adoption, the new or revised committees will develop scopes of work to guide their implementation of the Regional Water Supply over the next several years.

The scopes of work will be presented to the Steering Committee at a proposed April meeting.

CFWI Next Steps

CFWI 2020 Guiding Principles

1. Review and update the sustainable quantities of traditional groundwater sources available from the CFWI 2015 Plan for water supply that can be used without causing unacceptable harm to the water resources and associated natural systems.
2. Monitor progress of regional strategies and solutions identified in the CFWI 2015 Plan; review and update strategies to meet water demands that are in excess of the sustainable yield of existing traditional groundwater sources.
3. Establish consistent rules and regulations for the three water management districts that meet the Collaborative Process Goals and implement the results of this Central Florida Water Initiative.
4. Encourage funding for regional strategies necessary to achieve the objectives of the CFWI.

CFWI Next Steps

Collaborative Process Goals

- a) Update the single hydrologic planning model used to assess the availability of groundwater
- b) A single, uniform definition of “harmful to the water resources” consistent with its usage for CUPs & WUPs.
- c) One reference condition
- d) A single process for permit reviews
- e) A single, consistent process, as appropriate, to set MFLs and water reservations
- f) An updated single multidistrict regional water supply plan, including any needed recovery or prevention strategies and a list of water resource or supply development projects
- g) Address other directives in law by the Florida Legislature

The process will provide flexibility for cases where Recovery Strategies have been adopted, such as for the Southern Water Use Caution Area in the SWFWMD.

CFWI Governance – Next Steps

