Memorandum

To: Savannah – Upper Ogeechee Regional Water Planning Council

From: Andrew Jarrett & Laura Hartt, Jacobs

Date: February 23, 2017

Subject: Savannah – Upper Ogeechee Council Meeting 4

Regional Water Plan Review and Revision Process

Meeting Summary

This memorandum provides the meeting summary of the Savannah – Upper Ogeechee (SUO) Regional Water Planning Council Meeting 4, held on February 23, 2017 at the Columbia County Exhibition Center in Grovetown, Georgia. The meeting was held from approximately 9:30 AM to 2:30 PM.

Welcome and Introductions

The minutes of the prior meeting were approved.

Chairman Cross passed made a motion, requesting to amend the agenda to allow Dr. Carol Couch to provide an update on the Savannah Oxbow Study. The motion was carried.

PC reviewed the projected schedule for completing the draft plan with the Council:

- Council to review revised Sections 3, 4, and 5 during the current meeting, (providing final comments/edits to the PC within 2 weeks)
- Council to review original management practices from Section 6 of the 2011 Plan during the current meeting, proposing adjustments as necessary
- PC to incorporate Council and EPD recommended adjustments (re: amended Water Stewardship Act & 2015 drought management rule) into Section 6 and 7
- Technical Subcommittee to convene to review draft updates of Sections 6, 7 and 8
- PC to incorporate Subcommittee edits into Sections 6, 7 and 8 as well as any comments received from the Council for the remaining Plan Sections
- EPD to review draft Plan Update
- Council to meet to review and approve Plan Update for public comment on 3/29/17
- 45-Day Public Notice period
- Final Plan Update approved by Council and EPD in June

Review of Regional Water Plan Deliverables

Demand Forecast Technical Memorandum

PC reviewed the Demand Forecast Technical Memorandum with the Council.

Section 3: Water Resources of the Savannah-Upper Ogeechee Water Planning Region

Question/Comment: Council Member Boardman asked if in Section 3.32, the Priority Conservation Area have changed.

Response: PC responded that those areas were selected based on the State Wildlife Action Plan (SWAP) and are as current as the most recent version of Georgia's SWAP.

Section 4: Forecasting Future Water Resource Needs

Question/Comment: Council Member Walker asked whether the industrial forecasts for industrial users are based on permitted forecasts or on use.

Response: Permitted use. Council Member Walker noted that use of permits allows a buffer for future forecasting demands.

Section 5: Comparison of Water Resource Capacities and Future Needs

Question/Comment: Council Member Walker expressed concerns that water quality might not be adequately addressed.

Response: Chairman Cross noted that during drought, downstream flows have been maintained but acknowledged that water quality might be an issue.

A few remaining questions from the previous Council meeting were addressed:

- Are new permits available for withdrawals from the Ogeechee River?
 - Yes, as long as water quality standards aren't violated.
- Is data available showing the actual flow of the Ogeechee River from 1960 onward in order to show increase or decrease?
 - o There is some historical data available.
- Is there enough groundwater to cover surface water shortfalls for the lower Ogeechee River basin?
 - The groundwater assessments performed by Dr. Jim Kennedy addressed this and it was not ruled out.

Oxbow Study

Dr. Carol Couch (Phinizy Center for Water Sciences) provided an overview of the Center's efforts to restore oxbows along the Savannah River. Historically, these oxbows were cutoff in order to straighten the channel for navigation. Her current work entails a feasibility study of 22 (out of 41) oxbows in order to determine their restoration potential. Once restored, these oxbows have the potential to enhance fish and wildlife habitat and improve water quality/assimilative capacity. The USACOE has developed a draft project management plan to scope the work and estimate costs, determining a total price tag of \$2.8 million requiring a 50% or \$1.4 million match from non-governmental sponsors.

Question/Comment: Council Member Walker asked if there was equivalent interest in pursuing the work on the South Carolina side of the Savannah.

Response: Dr. Couch indicated there were concerns about how to address private property rights.

Question/Comment: Council Member Boardman asked if there were opportunities in the scope of work for in-kind contributions that would help meet the non-governmental match requirement.

Response: Dr. Couch indicated there were and that sponsors can bring in-kind donations through subject matter experts contributing to the project or by bringing in an activity that the USACOE could not easily conduct. For example, her Center would be providing information to help understand the effects of restoring oxbows to help reduce organic carbon. They have current water quality and condition information about some of the oxbow locations. She was unsure about the percentage of match that could be in-kind, but estimated 20%.

Review Process to Update Management Practices

PC outlined Chairman's recommendation to use a Technical Subcommittee to revise the management practices in Section 6 as well as implementation in Section 7. Council members agreed to that approach. Serving on the Technical Subcommittee are Azevedo, Boardman, Fowler, McCorkle, McGill, Walker, and Weidimeyer.

Review and Discussion of Management Practices Section 6: Assessing Water Needs and Regional Goals

PC reviewed updated gap information and existing measures previously selected by the Council for closing those gaps.

Council Members in attendance at the Shared Resources Sub-Committee Meeting (1/25/2017) shared a summary of the discussion with the rest of the Council. Key points included:

- Council Member Webster noted that many of the forecasted gaps are at least partially resulting from agricultural water use. However, he asked about historical stream flows for Ogeechee, questioning whether any gaps are truly the result of ag use, or rather a typical condition for the river. He also noted that both the meters in use for monitoring ag water use, and the collection of those readings, is currently insufficient to present an accurate picture of ag water use.
- Council Member Webster noted that one option for addressing surface water availability gaps, switching to groundwater, is likely not a viable option due to environmental regulations.
- Council Member Webster noted that there are significant number of wells in the state that are unmetered, and further noted that after 2004 it was the farmer's responsibility

to install the meter. Council Member Webster also noted that most of the data comes from southwest Georgia rather than southeast Georgia.

o PC acknowledged that Council's comments and the suggestion regarding using the Southeastern Experiment Station data, and they will work to incorporate those points into the plan update to address forecasted gaps.

PC then went through each management practice in Table 6.1 and asked Council members for any comments or suggested edits to be incorporated into a draft update to Section 6. Comments/suggestions were as follows:

Water Demand

WD1 –Chairman Cross noted that water use is declining, perhaps as a result of the water conservation measures. Council Member Walker asked for a review of the new water efficiency rules. PC reviewed the water loss audit reporting requirements with the Council. EPD offered to help with updated language. Otherwise, Council recommended retaining the measure.

Council Member Fowler requested per capita water use over time since the beginning of the plan (2011) in order to demonstrate that the management practices are working.

WD2 – EPD offered to help with any needed language updates. Council recommended retaining the measure.

WD3 – Council Member Fowler asked if this is the right place to mention ag metering. Chairman Cross suggested they further address the question in the Technical Subcommittee.

WD4 – Council Member Boardman asked whether meters are read quarterly or annually. Council Member Webster noted that the farmer is out every day and could do the readings. Council Member Webster suggested that EPD consider an audited, self-reporting system in order to preserve manpower. After some discussion, EPD suggested that the Council consider adding funding for ag metering to the Section 7 table on recommendations to the state. Technical Subcommittee will discuss further.

WD5 – Council Member Fowler asked if tiered rates have been implemented anywhere in Georgia. PC noted that the Metro District requires the measure of all local governments with respect to residential use. An ARC representative noted that 24 coastal counties require it. UNC has a financial dashboard to compare utilities and rate structures. Council recommended retaining the measure.

WD6 – PC offered to send out Technical Memo that outlines possible Tier 3 and Tier 4 water demand management options by sector. Technical Subcommittee will discuss further.

Water Supply

WS1 – Council Member Walker questioned how much of what is in this MP is required regardless. EPD indicated that a lot of the measures are. Section 7 also outlines the responsible parties for implementation. Council recommended retaining the measure.

WS2 – Council recommended retaining the measure. Technical Subcommittee to review with EPD Guidance.

WS3 – Council recommended retaining the measure. Technical Subcommittee to review with EPD Guidance.

WS4 –EPD noted that this measure pertains to a study presented by Dr. Kennedy at an earlier meeting. Council recommended retaining the measure. Technical Subcommittee to review with EPD Guidance.

WS5 - Council recommended retaining the measure. Technical Subcommittee to review with EPD Guidance.

WS6 – Council Member Walker noted that there is no longer a surface water supply gap for the Little Tennessee River because a new water treatment facility has been permitted for operation in the last couple of weeks. Council Member Walker recommended deleting the measure. Council recommended deleting the measure. Technical Subcommittee to review.

WS7 – Chairman Cross suggestion that raising the elevation of Clark's Hill might fit here. Technical Subcommittee to review.

WS8 – Council recommended retaining the measure. Technical Subcommittee to review.

Additional Water Demand/Supply Management Practices – PC asked the Council if they had any additional management practices for addressing water availability gaps and goals. Council Member Walker made a motion to restate the Council's position on prohibiting interbasin transfers here. Motion was carried. Cross will provide the original resolution language for inclusion by the Technical Subcommittee.

Education

ED1 – Council Member Boardman requested the addition of other BMPs pertaining to land management activities (ag, forestry, etc.). Council concurred. Technical Subcommittee to review.

ED2 – Council recommended retaining the measure. Technical Subcommittee to review.

Water Quality

Council Member Boardman asked for clarification on the surface water quality gaps. He wanted to know if only Georgia streams were included or if South Carolina Streams were in the models as well. EPD stated that South Carolina information is included to the extent it was available. Council Member Boardman suggested footnotes in sections 3 and 5.

WQ1 – Technical Subcommittee to review with EPD Guidance.

WQ2 – Technical Subcommittee to review with EPD Guidance.

WQ3 – Technical Subcommittee to review with EPD Guidance.

WQ4 – Chairman Cross noted that the TMDL process was replaced with the 5R process for Savannah Harbor. EPD suggested deleting the measure, but noting in Section 7 the implementation of the 5R process.

Council Member Walker noted that much of the phrasing throughout Table 6.1 needed to be changed from "develop" to "continue to use" or "implement." An ARC representative also noted that many of the education materials already existed and could be tailored appropriately for local use. PC offered to make those edits prior to sending the document to the Technical Subcommittee for review.

WQ7 – Council Member Walker recommends broadening the language to include restoration of natural wetlands as well. Council agrees to the change. Technical Subcommittee to review.

WQ5, WQ6, WQ8, W9, W10 – Council recommends retaining these measures. Technical Subcommittee to review.

WQ11 – Comment from the general public requesting addition of Georgia Adopt-A-Stream. Technical Subcommittee to review.

WQ12 - Council recommends retaining the measure. Technical Subcommittee to review.

WQ13 – Council Member Jordon commented that the City of Wadley has oxidation ponds, but lots of infiltration into their systems. They are under consent order, but can't afford to make the improvements. How do you solve something like that? Technical Subcommittee to review.

WQ14 – Council Member Boardman recommended leaving the language as is. Council concurred. Technical Subcommittee to review.

Additional Water Quality Management Practices – PC asked the Council if they had any additional management practices for addressing water quality gaps and goals. Council Member Jordon made a general comment more needs to be done to communicate key points of the Plan to local governments and the public. Council Member Fowler asked if consultants or EPD could make a powerpoint so that Council could give presentations. EPD noted there were fact sheets and highlights documents already available. Council Member Walker suggested that you want to have the core information, but you need to make sure you can adapt it to resonate with your audience. Council Member McGill noted that an Executive Summary would be helpful for the Plan Update.

Chairman Cross requested that EPD derive an appendix with drought trends over the past 20/25 years.

Section 7: Implementing Water Management Practices

PC summarized the contents of Section 7 for the Council. Members will share any comments they have with the Technical Subcommittee.

Next Steps

PC reviewed the timeline and process for updating the remainder of the plan with Council members as outlined earlier.

Public Comments

Both Ellison (GFC) and Marcellino (UGA Extension) offered their assistance to the Council as needed.

Meeting Adjourned ~ 2:30 pm

Meeting Attendance

Council Members

- Ron C. Cross, Chairman
- Braye C. Boardman
- Jerry L. Boling
- Dan T. Fowler
- Patricia Goodwin
- Jennifer Hayes
- Thomas C. Jordan
- Chris McCorkle
- Tim McGill
- Sue Parr
- Larry S. Walker
- R. Lee Webster

Georgia EPD

Jennifer Welte

Planning Contractors (Jacobs Engineering)

- Katherine Atteberry
- Andrew Jarrett
- Laura Hartt
- Partiban Raja