# Memorandum

| То:      | Savannah – Upper Ogeechee Regional Water Planning Council                                                           |
|----------|---------------------------------------------------------------------------------------------------------------------|
| From:    | Katherine Atteberry, Jacobs                                                                                         |
| Date:    | April 27, 2016                                                                                                      |
| Subject: | Savannah – Upper Ogeechee Council Meeting 1 – Regional Water Plan Review<br>and Revision Process<br>Meeting Summary |

This memorandum provides the meeting summary of the Savannah – Upper Ogeechee (SUO) Regional Water Planning Council Meeting 1, held on March 9, 2016 at the Columbia County Exhibition Center in Grovetown, Georgia. The meeting began at 9:30 AM and followed the agenda with one minor change in the order of presentations (the agriculture demand estimate and method update was presented before lunch).

#### 1) Welcome and Introductions

Chairman Ron Cross called the meeting to order and recognized political candidates and representatives in attendance. He then asked Council Members and guests to introduce themselves (see the end of this meeting summary for a list of all attendees). Chairman Cross introduced Katherine Atteberry with the Planning Contractor (PC) team to begin the meeting. The PC introduced Georgia Environmental Protection Division (EPD) staff, Jeff Larson and Jennifer Welte, and the remainder of the PC team, Zakiya Seymour and Andrew Jarrett.

## 2) Overview/Schedule/Vision and Goals/Memorandum of Agreement

The PC presented the following information:

- Provided an overview of the project and schedule
- Discussed use of the plans from Round 1 to date, acknowledging previous work completed during the interim planning cycle with other PCs
- Introduced key water planning individuals from Georgia EPD and the PC team, and the roles they would play in the review and revision process
- Reviewed key elements of the planning process and the timeline for completing these elements during the review and revision process

- - Walked through the process of the Regional Water Plan review and revision from start to finish, and spoke about the schedule for meetings and what tasks will be completed in preparation for each
  - Reviewed the vision and goals using the PowerPoint presentation
    - The vision and goals were also provided on the back of the meeting agenda;
    - The PC called for comment or any amendments, and none were raised •
  - Covered the Memorandum of Agreement (MOA), the Operating Procedures and Rules for Meetings, and the Council's Public Involvement Plan, and highlighted how these documents provide guidance for the review and revision process
    - Georgia EPD noted that they have prepared an MOA extension document for Council's consideration and provided the Council with the document.
    - The MOA extension document was discussed. The document, upon execution, will officially extend the agreement through the review and revision process. Council Member Jerry Boling called for a motion to approve the document and Chairman Cross called for vote. The motion was approved by consensus.
  - Reviewed public involvement and coordination with other regional water council meetings
    - Chairman Cross spoke to the SUO Council Members about their availability to attend other council meetings for the purpose of being better informed about neighboring council activities and issues.

## 3) Clean Water Fund Update

Council Member Braye Boardman provided a Clean Water Fund (the Fund) update. He stated that the Fund will begin operations on April 1, 2016. It has taken roughly a year and a half to lay groundwork with stakeholders to begin operations. Water quality improvements for both Georgia and South Carolina are the end goal of the Fund. One important consideration of the Fund is to demonstrate to both South Carolina Department of Health and Environmental Control (DHEC) and Georgia EPD that the Fund is having a tangible impact on water quality improvements in the basin. To date, financial commitments from five major water authorities in the basin have been secured. The committed municipalities include Savannah, Beaufort-Jasper, Augusta, North Augusta, and Columbia County.

#### 4) Updated Population Projections

The PC presented the following information:

Source of information for updated population projections

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  - Georgia's historical population growth over time
  - Updated state and regional population projections that also show the comparison to the Round 1 population projections
  - The methodology employed to perform the population projection updates
    - The current population projections are more in line with historical trends than the Round 1 projections. The PC noted that the current predicted growth for the state and the region, while still showing positive growth over time, is not anticipated to increase at the rate that was predicted for Round 1. Round 1 population projections were developed prior to the 2010 Census and represented an unusually high rate of population growth when viewed in a historical context. The Round 1 population projections were influenced by historical levels of in-migration and relatively high birth rates at the time the projections were developed.
    - Although the state's population continues to grow, it is important to recognize that most of the growth is occurring in urbanized areas and larger cities. Between 2010 and 2013, Census data showed that about half of Georgia's counties have experienced population declines. The majority of counties with declining population are considered rural.

Question/Comment: Why is there such a large change between the prior (Round 1) population projections and the updated population projections?

Response: The earlier population projections were influenced by the abnormally high growth that Georgia was experiencing in the period prior to the 2010 Census. Since that time, and as reflected in population values from the 2010 Census and the intervening period, population growth projections have been adjusted and are better aligned with broader historical population trends.

Question/Comment: A request was made to see the county-level numbers.

Response: The county-level population projections will be provided to the Council Members.

#### 5) Municipal Water/Wastewater Forecast Updates

The PC presented the following information for municipal water forecast updates:

- Review of the Round 1 methodology used to calculate municipal water demands
- Review of the per capita adjustment factor (average rate of change from 2010 to 2014) that was applied to the Round 1 gallons per capita per day (gpcd) for each county to arrive at the updated gpcd value for calculating publicly-supplied municipal water demands
- Municipal gpcd results for the SUO region.

- Overall, there was a small change across the region between the Round 1 and updated values (127.5-gpcd regional average value in Round 1 compared to the 126.5-gpcd regional average updated value). The average rate of change across the region is 0.42 percent. The PC stated that population is the more significant parameter in terms of driving estimates of municipal water demands.
- EPD staff noted that they are currently taking a closer look at an additional source of information regarding county-level per capita values, and will come back to the Council with further information as that analysis progresses. The additional source of data was used when considering the 2010-2014 trends and arriving at the per capita adjustment factors for each County. A current snapshot of the additional source of information, which is still under review, shows a regional average value of 134 gpcd.

Question/Comment: A comment was made by a Council member that the gpcd value for McDuffie County is actually greater than their production capacity and that the number must be too high.

Response: The PC will follow up on the gpcd value for McDuffie County with the Council member to respond to and address this concern.

Question/Comment: A Council member asked if this included private wells.

Response: The PC responded that the publicly-supplied municipal water demands did not include private wells; private wells are accounted for in the self-supplied municipal water demands.

Question/Comment: Council agreed that county-level numbers can be reviewed outside of this meeting to determine further comments or questions.

Question/Comment: A question was asked about what might be affecting the changes in per capita values. Chairman Cross spoke about the effect of adding housing stock that has newer, more water-efficient plumbing fixtures.

The PC then presented the following information for municipal wastewater forecast updates:

- Review of the Round 1 methodology used to estimate total municipal wastewater generation
- Review of the methodology used to update the municipal wastewater generation forecast and updated results by region
- Statement that any trends toward centralized wastewater treatment systems and away from septic systems that were identified during Round 1 were carried forward in the municipal wastewater forecast update.

## 6) Industrial Water/Wastewater Forecast Updates

The PC presented the following information for industrial water/wastewater forecast updates:

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- Explanation of how industrial water and wastewater demand forecasts were developed in Round 1
- Review of Round 1 industrial water demands by category and source
- Review of Round 1 industrial wastewater flow by discharge method
- Unless there is a significant change to industry in the Region identified through the Council's input, EPD is not proposing to change the industrial forecasts during this Plan update process.

Question/Comment: A Council member asked whether the Council could be provided with a breakdown of the industrial demand forecasts based on source (surface water versus ground water).

Response: The PC will follow up and provide that information to the Council Members.

Question/Comment: A guest from the audience asked when statewide employment projections will be updated.

Response: EPD staff answered that they were not aware of any current plans or timeframe for those updates.

## 7) Current Agricultural Demand Estimate and Method for Updates

The PC presented the following information for agricultural demand:

- The Georgia Water Planning & Policy Center Albany State University (GWPPC) teamed with members of the University of Georgia, Agriculture and Applied Economics for this update; both entities were involved with the original forecast, but GWPPC is the lead entity for this round of planning
- Updates will be conducted for irrigated acreage, livestock, nursery, and golf course irrigation
- The original forecast used three major steps/inputs for obtaining estimates of irrigated acreages: 1) wetted acreage information from EPD that was imported into GIS, 2) meter data at select locations to refine the wetted acreage data base, and 3) desktop analysis of aerial imagery to identify missing wetted acres.
- Crop water application rates were derived using a crop demand forecast model based on crop type, county, soil type, and climatic conditions
- The updated method refines the above inputs with: 1) information on animal counts from the U.S. Department of Agriculture National Agriculture Statistic Services; 2) updated wetted acreage from detailed mapping at some locations in south Georgia (in the Flint, Ogeechee, and Suwannee-Satilla basins); and 3) additional meter data.

 Preliminary results can be viewed in today's Council Meeting PowerPoint. The final results will be presented at the Joint Meeting in June 2016.

Question/Comment: It was noted that both Stephens County and Lincoln County were missing from the table that displayed the 2009 and 2014 irrigated acres for each county in the region.

- Response: The PC will consult with Mark Masters to correct this table and the updated table will be included with the presentation slides provided to the Council after the meeting.
- Response from Mark Masters via email after the meeting: There are no wetted acres in Stephens or Lincoln Counties, so they were not included in the table.

Question/Comment: A Council Member raised a concern about how new agriculture data is handled in the planning process, because a lot of the water used may actually work its way back to the aquifer instead of flowing out to the river.

Question/Comment: A Council Member asked a question about the cause for the increase shown, and if it was growth in use or just better data.

- Response: The PC will seek a response to this inquiry from Mark Masters and provide that response to the Council.
- Response from Mark Masters via email after the meeting: The increase is a mix of both growth in use and better data. The Georgia Water Planning and Policy Center has better information than was available during the first round, but there has been growth in many areas of the state.

## 8) Lunch

The following presentations were made during lunch and are available in the PowerPoint slide deck for this Council meeting:

Regional Water Planning – Jeff Larson, Georgia EPD Savannah River Projects – Stan Simpson, U.S. Army Corps of Engineers

#### 9) Energy Forecast Updates

The PC presented the following information for energy forecast updates:

- Review of the energy sector water demand forecasting methodology from Round 1
- Updates to energy sector water demands are not yet complete and will be shared with the Council once available
  - There is one major power-generating facility in the region: Plant Vogtle in Burke County. This facility will be expanded by two additional units within the next several

years. The addition of those two units will increase both water withdrawals and consumption.

• EPD staff noted that members of the Ad Hoc Energy group are assisting EPD and its contractor with completing the updates to the energy sector water demand forecasts. Those members include representatives from Georgia Power, Dalton Utilities, Oglethorpe Power, the Municipal Electric Authority of Georgia (MEAG), and the Georgia Environmental Finance Authority (GEFA).

Question/Comment: A Sierra Club representative stated that as early as 2019 we could see Georgia Power using levels of wind and solar it originally projected to reach by 2050. Council Member stated that Georgia Power has some renewable sources currently in its portfolio, but it is not a large percentage of overall generation.

# 10) Section 319 (h) Georgia's Nonpoint Source Implementation Grant

Denisse Hernandez, EPD, presented this agenda item. Ms. Hernandez made the following points during the presentation:

- EPD is making money available via special award to develop or revise a nine-element Watershed Management Plan to address nonpoint source of pollution in the SUO region. The funding is targeted for regional councils to partner with subgrantees. EPD is seeking the Council's input regarding the priority watershed of focus, and the subgrantee to be selected to write the plan and serve as the primary implementing entity. Funding can be made available via sole source for eligible subgrantees, which must be public entities or local governments. Grants require a 40 percent match of cash or in-kind services.
- Several existing projects were briefly highlighted including the Horse Creek project in the Altamaha region, which was awarded to Pine Country Resource Conservation and Development (RC&D) as part of the previous water plan's implementation.
- Information was presented about the topic of priority watersheds, but the specific priority watersheds for the SUO region were not shown or listed for the Council, and will be provided to the Council as a follow-up to this meeting.

Question/Comment: Council Member asked if the US Forest Service could qualify for a grant, specifically mentioning forest roads that require funding for repair and maintenance. The response from EPD staff was that it is unlikely that federal money can be awarded to other federal groups, but could go to state groups, such as the Georgia Forestry Commission.

Question/Comment: A representative for Georgia Mountains Regional Commission (GMRC) asked when the 319(h) applications are due, and if they could put together a list of eligible watersheds for Council consideration.

Response: EPD staff responded that they would like to get applications in by June 2016 and they would appreciate any input that GMRC wanted to provide to the Council.

#### **11)** Appointment of Subcommittee

The PC introduced the concept of appointing subcommittees for the review and revision process. Chairman Cross called for Council input on potential subcommittees. The end result of discussion was that after the PC has sent out additional information requested by the Council, an "office hours" call will be held for Council Members to ask any additional questions. The "office hours" will be structured to provide specific slots of time related to specific topic items, such as population forecasts and municipal water demands.

## 12) Public Comment/Local Official Comment

Cathy Black from the Georgia Forestry Commission distributed a two-page handout showing the highlights of the 2015 Forestry Best Management Practices (BMPs) Implementation Survey. The survey shows the trends in BMP implementation from 1991 – 2015 for stream management zones, stream crossings, forest roads, special management areas, harvesting, mechanical site preparation, chemical site preparation, firebreaks/burning, tree planting, and equipment servicing.

#### 13) Wrap Up/Council Meeting 2 Preview/Council Meeting 1 Evaluation

Chairman Cross and the PC concluded the meeting.

Question/Comment: A statement was made that the third meeting of this update process should be targeted to involve previously-identified "key implementing actors."

Question/Comment: A request was made that Council Members reach out and encourage the Council Members who were not present to attend future meetings.

Question/Comment: Two of the Council Members asked about still being listed as alternate members, and if they could be made permanent. To this point, Chairman Cross asked about the status of Council appointments. Response from EPD staff is that appointment decisions remain in the hands of the Governor, Lt. Governor and House Speaker.

The meeting adjourned at 2:30 PM.

#### 14) Meeting Attendance

SUO Regional Water Council members in attendance:

- Ron C. Cross, Chairman
- Bruce Azevedo
- Braye C. Boardman
- Jerry L. Boling
- Dan T. Fowler
- Patricia T. Goodwin
- Patrick D. Goran
- Chris McCorkle
- Tim McGill
- Charles G. (Charlie) Newton
- Larry S. Walker
- R. Lee Webster
- Tom Wiedmeier
- Tenia S. Workman

Georgia EPD Representatives in attendance:

- Jennifer Welte
- Jeff Larson
- Denisse Hernandez

Reginal Water Council contractors in attendance from Jacobs Engineering:

- Katherine Atteberry
- Zakiya Seymour
- Andrew Jarrett

#### Public attendees:

- Ed Bettross (representing Georgia DNR Wildlife Resources)
- Cathy Black (representing Georgia Forestry Commission)
- Sam Booker
- Frank Carl
- Caroline Collins
- Oscar Flite (representing Phinizy Center for Water Sciences)
- Jennifer A. Güt (representing Savannah Riverkeeper)
- Adam Hazell (representing GMRC)
- Shari Mendrick (representing Columbia County)
- Harry Shelly (representing South Carolina Savannah River Basin Advisory Council)