

## Memorandum

*To: Georgia Regional Water Planning Councils – Altamaha*

*From: CDM Smith*

*Date: April 15, 2020*

*Subject: Georgia Regional Water Planning Council Meeting Summary  
of the Altamaha Council Meeting*

This memorandum provides the meeting summary of the February 13, 2020 Altamaha Regional Water Planning Council Meeting, held at the Southeastern Technical College in Vidalia, Georgia. The Council Meeting was held from 9:30 AM to 1:30 PM. This memorandum provides a summary of the items presented during the Council Meeting.

### **1) Welcome and Introductions**

Chairman Jeffords initiated the meeting and welcomed the attendees. Before discussing Council business, a tribute was given to honor Council Member (CM) John Roller and present CM Roller's family with tokens of appreciation for CM Roller's contributions to the Council. Chairman Jeffords then began the meeting by inquiring about new Council member appointments. Jennifer Welte (EPD) discussed the status of this item with the Council and is working to finalize a list of recommendations for the appointing authorities. Chairman Jeffords stated he would like representation from each County on the Council, and Vice-Chair Stavriotis asked for details on how EPD plans to submit names for re-appointments. No new appointments have been made to any of the other Councils thus far but, press releases will occur as appointments are made.

Chairman Jeffords then presented the meeting minutes from the last Council meeting held in September 2019 and asked for the Council's approval. A motion was given, followed by a second and all council members present voted to approve the previous minutes. The Chairman then presented the meeting agenda and asked if there were any changes and if not, if the Council would be willing to approve the agenda for today's meeting. A motion was given, followed by a second and all council members present voted to approve the agenda.

### **2) Review Q&A from September 10, 2019 Power Generation and Energy Sector Forecasting for Regional Water Planning**

Next, the Planning Contractor (PC), Mr. Bill Davis, reviewed the Question and Answer memorandum from the September 10, 2019 Power Generation and Energy Sector Forecasting

discussion. The PC reviewed the four main questions as well as the responses and entertained further questions and comments from CMs.

Question: Chairman Jeffords asked about transportation information shown in Figure 1 (Projected Decline in “Energy Intensity” for Different Sectors) of the memorandum.

Response: The energy intensity has been projected to decline (i.e., be more efficient) but total energy demand is projected to increase due to more electric vehicles.

Comment: Chairman Jeffords stated the overall demand is going to increase but efficiency will offset some of the demand.

Bill Davis then reviewed Question 2 and the response. Coal is anticipated to phase out over time and solar is expected to grow in the future. A related question is whether projections of solar energy generation include the generation from private solar panels, and the answer is both yes and no. Solar energy generation is estimated for both utility-scale and small-scale (i.e., private solar panels). However, the expected contributions from private solar are subtracted from the grid demand and are not included in the projected future additional capacity from solar. Texas is broken out separately because it is its own reliability pool. One of the technologies being developed is large lithium batteries. Once more advances are made on how to store the energy, it is expected that solar generation will continue to increase.

Question: Chairman Jeffords asked for clarification about how coal is represented in one of the charts; it is unclear from the chart whether coal will still be around, or whether it indicates no further investments will be made in coal after 2035.

Response: Bill responded that yes, the graphic does not show what existing facilities are projected to continue operation, but rather shows that very few coal facilities will be brought on-line in the future.

Comment: Chairman Jeffords stated that residential solar is really ratcheting up, but installation costs are difficult to justify the cost savings.

Response: Bill responded that residential solar is projected to keep increasing, but a tax credit for solar installation just expired. Policies and regulations will now drive residential solar use.

Bill Davis then reviewed Question 3 related to the relatively flat projected growth in demand for the Southeast (SE) subregion. The annual growth rate of demand for the SE subregion is only 0.4% per year.

Question: What does MISO stand for?

Response: MISO stands for Midcontinent Independent System Operator. MISO Central and MISO South are subregions in the western part of the SERC region.

Bill Davis then reviewed Question 4 and stated that there do not appear to be any projections by fuel type for the SE subregion.

Comment: Jennifer Welte added that EPD is working with Georgia Power, MEAG, Oglethorpe Power, and Dalton Utilities to be part of the stakeholder group that will provide input into the water demand forecasting process. The PC will be working to update the energy demand forecast and prepare the forecast for all of Georgia.

### **3) Background and Overview of Upcoming Technical Work for 2020-2022 Regional Water Plan Update Cycle**

The PC explained to the Council that the next plan update cycle and initial focus areas will include: updated population projections, water demand and wastewater forecasts, surface and ground water availability resource assessments, and surface water quality and assimilative capacity resource assessments. The purpose of this discussion is to re-familiarize the Council with key technical products that inform the water plan update and provide a baseline for more refined discussions on items of interest or potential changes during the next cycle.

Comment: Chairman Jeffords expressed the importance of educating new CMs, keeping our mission in mind, taking economic advantages seriously, and emphasizing the effects on our resources from outside the region in the next plan update.

Response: Jennifer Welte stated that EPD is refining the groundwater and surface water availability assessments to provide more detail during the next plan update. In other parts of the State, recent Council meeting topics have included information about refinements to the resource assessments.

Question: Vice-Chair Stavriotis asked how the new Council members will get up the speed?

Response: Jennifer Welte answered that EPD and the PCs have some content ready that can be offered through a webinar and the forecasting work will also lend itself nicely as an introduction as well. Jennifer will send an email to each chair to request a representative from each Council to engage in the municipal demand forecast which will start in April. The overall schedule and how the process will be phased for the plan update is still under development. Jennifer added that there are stakeholder groups being formed to provide input to the industrial and energy water demand forecasts.

The most recent county population projections were reviewed next. These projections have been prepared by the Governor's Office of Planning and Budget (OPB) and are used consistently by all state agencies for multiple purposes. The 2011 Regional Water Plan was based on projections issued in 2010 which predicted a much higher growth rate. The 2015 projection growth rate (used for the 2017 RWP update) was much lower. The 2019 population projections show a similar trend to 2015 with a relatively flat growth rate. These values will be used in the next plan review and revision process.

Question: Chairman Jeffords asked why is there a discrepancy between neighboring counties that are very similar?

Response: The PC stated that we need to ask the demographer about some of these differences between individual counties. EPD can inquire with OPB and the Demographer's office. Jennifer

Welte added that for the Savannah-Upper Ogeechee Council, the local economic development office was able to provide some background on the differences between counties.

Question: Vice Chair Stavriotis asked if rural areas in Georgia are showing similar trends and if the urban areas are doubling in population? He expressed an interest in having someone talk about the effects of urbanization and urban vs. rural water resources needs at a future meeting.

Comment: Jennifer Welte said that Danny Johnson from the Metro district would be willing to speak as they are trying to offset growth with conservation practices.

Question: A CM asked about populations for Telfair County.

Response: The PC will need to research this and confirm.

The PC continued the presentation with water demands for the Altamaha region. He reviewed 4 sectors (municipal, industrial, energy, and agriculture) and showed that 50% of the water demand is for agriculture and only about 10% for municipal. On a county by county basis, Appling County has the most energy water demand due to Plant Hatch and Wayne County has the highest industrial water demand due to Rayonier. All the counties have a fair share of agricultural water demand.

Comment: A CM stated that Wayne County uses groundwater for Rayonier from the aquifer and recycles the flow back into the Altamaha River. Plant Hatch loses most of its water due to consumption and evaporation.

Question: Vice Chair Stavriotis asked if we can measure flow at the Altamaha River and downstream in the estuary to determine if we are gaining or losing ground?

Response: Jennifer Welte said that the more refined surface water modeling and additional planning nodes will help provide more information. The Coastal Georgia region requires a balance of brackish and freshwater downstream. She also stated she would ask Dr. Zheng if he could talk about this at the next Council meeting, along with model updates.

The PC then went into per capita estimates. He reviewed the water audit report data another consultant compiled from municipalities serving more than 3,300 people. They've used the water use at the municipal level and population served to come up with a weighted average for each county. These data can be made available as a handout, but some counties will not be included due to the 3,300-person threshold.

Comment: Chairman Jeffords is interested in seeing the weighted average for the entire region because it is mostly rural.

Comment: Jennifer Welte stated the municipal stakeholder group would like a member from each Council to participate. She will send an email out, and data at the County level will be included in the discussions of the stakeholder group.

Next, the PC talked about municipal, industrial, and agricultural water demand forecasts. For municipal wastewater, about half of the flow goes to septic systems and the rest goes into streamflow. Jennifer Welte added the municipal stakeholder group will be able to add more

detail to this subject. Industrial water use in the Altamaha region is dominated by the paper industry, food manufacturing, and textile mills. The PC will be leading the statewide effort to update the industrial water demand forecast and a stakeholder group will be assembled for input. The agricultural water demand forecast will also be updated by the Georgia Water Planning and Policy Center at Albany State University. The approach for forecasting this is to look at the past trends and consider foreseeable changes. Projections consider irrigated acreages available from existing information, aerial imagery and site visits, information on crop types, and projections using economic models. About two-thirds of the water for agricultural use is coming from groundwater in the region.

#### **4) Review Resource Assessments and Gap Analysis Technical Memo**

Next, the PC discussed ongoing updates and refinements to the groundwater and surface water modeling efforts. Dr. Kennedy will be invited to attend a future Council meeting to speak more about the refined groundwater modeling and how it has been updated. The steady state, or constant use model will work well for municipal and industrial sectors. Improvements to the model to account for transient, or time-varying use will better reflect agriculture use. Dr. Kennedy is working with water use information in all regions to capture growing season variable use. Additionally, an overall coastal plain model was built to replace individual sub regional models that were relied upon in the last rounds of planning. The new model can simulate what happens in all the aquifers at the same time to account for interactions between different aquifers.

New modeling efforts have begun for surface water availability. These efforts include assigning new planning nodes at discharge points, withdrawal points, reservoirs, and flow gages to account for growth demands and to analyze potential impacts to downstream users. Surface water from the Altamaha River Basin accounts for 28% of water demands in the region and is mainly used for agriculture and energy.

Question: Chairman Jeffords asked about water quality.

Comment: Jennifer Welte stated Dr. Booth is also having a contractor work on updates to the surface water availability resource assessment as well.

#### **5) Seed Grant Updates and Outreach**

Next, an update on the RWP Seed Grant Funding for 2020 was given. The deadline was October 31, 2019, and Pine Country RC&D collaborated with the University of Georgia to prepare a proposal to address erosion and nutrient management practices in the region. This project is unique because of its inclusion of both demonstration sites and outreach activities.

Demonstration sites are planned for a Toombs County corrections facility with livestock operations, and for a Vidalia onion farm site using poultry litter as fertilizer. This project also involves working with NRCS to promote manure control, keeping cattle out of waterways, and using buffers to trap sediment. The University of Georgia has been working to conduct educational outreach and continuing education for nutrient management plans specific to confined animal feeding operations (CAFOs). This proposal was awarded funding through

available 319(h) funding. The scope of work is in the process of being finalized and the project is expected to start in March.

Comment: Chairman Jeffords stated the DNR got a grant for recovery after hurricanes. The economic and environmental impacts as well as the lingering effects of a disaster on the agriculture industry needs to be addressed.

The PC then discussed recent outreach efforts including submitting an abstract for the Georgia Rural Water Association (GRWA) Spring Conference in May 2020 in Jekyll Island. Jennifer Welte also discussed the recent presentation she gave in January at the Georgia Municipal Association's Cities United Summit on the Regional Water Plan process that received a very good response from attendees.

Comment: A CM stated there needs to be continuing support for additional outreach and education of the public about the Regional Water Plan. The abstract was submitted for GRWA spring conference will be an opportunity to coordinate with other councils.

The PC also stated the council webpage has recently gone through an upgrade and now has a new look and feel, and the PC encouraged CMs to look at it.

## **6) Next Steps/ Public Comments/ Local Elected Official Comments**

The next meeting was discussed and based on input from the Council, should be scheduled in concert with when new council members have been appointed. Potential topics for the next meeting include groundwater modeling update with Dr. Kennedy and surface water modeling update with Dr. Zheng.

Comment: Chairman Jeffords stated that it will be important to set the right tone at the next few meetings so new members understand the goals and perspectives of the council. The goal is not to solve all the problems of the region but to stay focused on water resources.

## **7) GEFA Funded Projects in the Region**

This agenda item will be rescheduled for a future meeting.

The meeting adjourned at 1:30pm

### 8) Meeting Attendance

The table below summarizes the Altamaha Council Members in attendance as well as public and agency attendees.

<b>Affiliation</b>	<b>Name</b>
<b><i>Altamaha Regional Water Planning Council</i></b>	Rex Bullock
	Mark Burns
	Cleve Edenfield
	Ed Jeffords
	Paul Stavriotis
	Lindsay Thomas
<b><i>Regional Water Planning Council Planning Contractors</i></b>	Danielle Honour Bill Davis
<b><i>Georgia EPD</i></b>	Jennifer Welte
<b><i>Public/Agency Attendees:</i></b>	
Public	Furman Peebles
Pine Country RC&D	Rahn Milligan
Southern Company/Georgia Power	Daniel Carter