

Memorandum

To: Georgia Regional Water Planning Councils – Altamaha

From: CDM Smith

Date: October 14, 2020

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

This memorandum provides the meeting summary of the September 24, 2020 Altamaha Regional Water Planning Council Meeting, held virtually using the Zoom platform. The Council Meeting was held from 11:30 AM to 1:00 PM. This memorandum provides a summary of the items presented during the Council Meeting.

1) Welcome and Introductions

CDM Smith, The Planning Contractor (PC) initiated the meeting, welcomed Council Members and guests, and asked each Council Member (CM) and attendee to introduce themselves. An outline of the topics that would be covered during the Council Meeting was then presented. As a quorum was not present, the Council did not vote to approve the Meeting Agenda or the past meeting summary from the from February 13, 2020 Council Meeting in Vidalia. Due to the number of participants who were in attendance, the Council Chairman, Ed Jeffords, decided to continue with the meeting agenda as planned.

2) Updates from EPD – Jennifer Welte, Georgia EPD

Jennifer Welte gave a brief overview of updates from Georgia EPD. The EPD office is open by virtual meeting or appointment only. The last in-person meeting was the Altamaha Council meeting in February. The first virtual/in-person hybrid meeting will be for the Suwannee-Satilla region on September 30th. This will be something to keep in mind as there is no specific guidance for the next in-person meeting other than to work with the Council to see what they would be most comfortable with.

EPD has engaged the CDM Smith and Black & Veatch teams to work on the technical forecasting effort which serves as the foundation for the plan update. The statewide budget remains intact and the same as in the past. The timeframe for the upcoming plan update has shifted from June 2022 to September or late fall of 2022. The teams will be coordinating with each other to ensure the plan update timeframe is consistent across all regions.

Appointments have not yet been processed for any of the Councils. The Governor's office has been running behind on appointments due to COVID-19. EPD will continue to work with the Governor's office and the Councils to ensure appointments are made as timely as possible.

Question: Chairman Jeffords asked if the meetings next year will be focused on plan update preparation?

Response: Jennifer Welte replied that yes, the meetings next year will mainly focus on the next plan update but hopefully there will be a newly appointed council of participants by then.

3) Updates on Technical Work Supporting the 2020-2022 Regional Water Plan Update Cycle – Bill Davis, CDM Smith

The PC then outlined the updates of the technical work that will support the 2020-2022 Regional Water Plan update cycle. The purpose of this overview was to update the council on ongoing activities that will support the update, and to give the council an idea of the progress and what may be needed from council members for these tasks.

Municipal Water Demand Forecast

The municipal water demand forecast is being prepared by the Black & Veatch team. The team has been working with stakeholders across the state for input to supplement the forecast. A municipal stakeholder group with one representative from each Council and the Metro Water District was formed and have met to discuss methodology and initial data collection and to review draft forecast results. CM Cleve Edenfield represents the Altamaha Council. The next meeting will be held this fall. For all self-supplied households, 75 gallons per day per capita was assumed and will remain constant for forecasting into the future which will also use the population projection to estimate water demand.

Comment: Chairman Jeffords commented that most of this region is rural with two-thirds of the population residing in unincorporated areas.

The forecasting team consulted EPD records from permitted municipal water withdrawals for estimates of public supply. Previously, municipal forecasting used the per capita estimates from the 2011 Regional Water Plan and applied a percent adjustment, quantified from water withdrawals and customers served from 2011 through 2015. For this forecast, the team is turning to 2015 through 2018 water audit information from systems serving 3,300 people or more to get per capita estimates for each County. These estimates were then used to create a weighted average of all municipal systems within each County. Generally, there has been a decline in municipal water demand. For capita values that seem high, the team is working to track down large commercial or industrial uses that might be factored into those values and to adjust the per capita values accordingly.

Comment: Chairman Jeffords commented that per capita estimates have dropped by almost one-third since 2011.

Response: The PC added that water use fixtures and equipment are becoming more efficient.

Response: Jennifer Welte responded the source (i.e., water audits) being looked at now is different than what it was in 2010. There is a lengthy list of water loss audits compared to the population served estimate that is then divided by actual use. This may also help explain the differences.

Wastewater discharged to surface water is also being looked at as part of the surface water modelling process. Using census and public health department data, the team picked out what percent of the County population is on septic versus municipal wastewater treatment. For the population on public wastewater treatment, EPD discharge data for point source (i.e., to streams, rivers) and land application systems (LAS) was used. Currently, this is ~3 mgd going to LAS and ~11 mgd going to point source for the region. Given the increase in population, the water demand forecast and ratio between the water and wastewater, the wastewater discharges will remain about the same.

Energy Water Demand Forecast

During the previous Council Meeting at Plant Hatch, there was discussion about how the energy sector uses water and how water demand estimates are made. An energy sector stakeholder group was assembled and met in April to review methodology and available data. The group was asked to review the data and update the list of thermoelectric facilities in the state. The draft technical memorandum has been created and reviewed by the stakeholders, and it is currently under review by EPD. The technical memorandum includes water demand by region and will go out to the councils upon completion of EPD review. In the Altamaha region, Plant Hatch will continue to be in operation into 2060. Though there is withdrawal from the river with some consumption, a large portion is returned.

Assumptions were made about the forecast going out to the year 2060. Coal fired facilities are gradually being retired, however, it is unknown when and which ones. By 2060, it is likely coal fired facilities will have a minimal presence, if any. It was assumed that natural gas-fired generation and renewable (mostly solar) resources will replace coal generation in the future. Additionally, an increase in capacity was assumed out into the 2030s to offset the retirement of coal-fired facilities, with half of the new capacity using natural gas and half using renewable resources. Water demand will decrease as solar does not require it and natural gas uses less water than coal-fired facilities.

Industrial Water Demand Forecast

The kick-off meeting for the industrial sector water demand forecasting was held on June 3rd. The last round of updates was performed during 2008-2010 and was used for the 2017 RWP update. This is the second time industrial data across the state of Georgia will be received. An industrial sector stakeholder group was formed to include representatives from various industries throughout the state. At the recommendation of the stakeholders, several sub-sector groups were formed specifically for the Poultry and Food Processing, Mining, Paper and Forest Products, and Manufacturing sub-sectors. Since different industries use water differently, the sub-sector groups met to discuss a method to estimate water demand for their specific industry. The Poultry and Food Processing, Mining and Manufacturing sub-sector groups sent out surveys to their respective associations for water demand feedback. The Poultry and Food Processing sub-sector group received assistance from the Georgia Poultry Federation (GPF) and the Georgia Tech Research Institute to survey members of the GPF. The PC is currently in the process of developing a draft memorandum to EPD for review. The Mining survey results concluded that change in demand will be minimal. Further research is being done for the Mining sub-sector group to look at how water is being used in each County.

Question: Chairman Jeffords asked who represents Altamaha?

Response: the PC responded that CM Brian Mooney represents the Paper and Forest Products subgroup.

Comment: CM Lindsay Thomas commented that the mining company he consults with has a relatively small water use. The water is reused and kept in lagoons, and rainwater is collected for use. The daily permit limit is approximately 450 gallons per day or far less. Lindsay suggested contacting Jim Renner with Chemours Mining Operation a call to confirm.

Comment: Chairman Jeffords added that though the water use is small, the mining presence in the region is also fairly new.

Response: the PC clarified that different mines use water differently and water use has been reduced because it can be reused. Looking over the past 10 years, there are average and maximum annual withdrawals both of which have been below the permitted amount.

Comment: Jennifer Welte suggested the PC reach out to Chemours to see if Jim Renner was included as a survey respondent. [Note: it was later confirmed that Jim Renner was a respondent to the mining survey.]

Response: The PC replied that the survey data was collected by a third-party to preserve confidentiality. Water use related to production is confidential. The surveys were conducted because the previous method was based on employment and the stakeholders agreed it was no longer the most accurate way to forecast water use. If we go back decades prior, industrial water use did increase with employment however, this is not the case for the past 10-15 years due to increased efficiency, automation, and recycling. Since then, industrial water use has been trending down.

The Manufacturing sub-sector survey results indicated that the water demand will be held constant. The Paper and Forest Products industry sub sector's water use is the highest of the sub-sectors, however, upon further discussion with the paper and forest products sub-sector group it can be assumed water demand will be held constant going out to the year 2060. As EPD performs this update every five years, new processing plants will be reflected in future updates. As of now, it is difficult to determine when and where an expansion may occur.

Comment: CM Brian Mooney added that each mill is getting more efficient and if there was an expansion, an effort would be made to reduce water demand. As an industry, the plan is to remain constant or reduce water use.

Question: CM Lindsay Thomas asked if someone was aware of and could provide clarification on a report from the Georgia Manufacturing Association indicating substantial water use increases below the fall line.

Response: The PC answered that that information might have been from the first draft where "What if" numbers were included. The paper industry sub-sector group has since reviewed anticipated increases in future water use and responded that there will be no significant increases in water use for this industry. The Georgia Department of Economic Development was also involved in the subsector advisory groups and is actively encouraging growth throughout the state. They are interested in attracting automobile production facilities, and paper industries to the "Wood Basket" of Georgia. Though they are encouraging the attraction of new

facilities to Georgia, there is no specific information indicating when or where there will be a new facility popping up.

There is coordination between the Industrial and Municipal PCs where water use of 0.2 mgd or greater is being observed. One topic of discussion among the industrial sub-sector groups is that the groups expressed that they do not want the water forecast to become a limiting factor for new industry. The Department of Economic Development was included in the discussions and did not feel as though water would become a limiting factor. When the plans get down to the Council level, there will be an opportunity for Councils to evaluate scenarios based on local knowledge.

The process of dividing the industrial sector advisory group into sub-sector groups has taken some extra time for completion, however, the preliminary forecasts and memoranda are being developed and will be reviewed by the sub-sector groups. Upon review, the materials from each sub-sector will be combined into one industrial sector water demand forecast technical memorandum. The report is expected to be released to the Councils late this fall or early winter.

Agriculture Water Demand Forecast

The Agricultural Water Demand Forecast considers irrigated crops, nurseries, animal operations and golf course operations. The forecasting team will be updating the wetted acreage estimate by looking at 2019 aerial imagery and conduct site visits to confirm estimates. Metering information will also be used to provide information on water use per crop type and irrigated acreage. This forecast is projected to take longer than the others, with updated estimates of current demands completed by the end of this year and updated estimates of future demands completed by March 2021. Mark Masters will be invited at a later time to present the update forecast to the Altamaha Council.

4) Seed Grant Updates – Dr. Gary Hawkins, UGA and Danielle Honour, CDM Smith

Next, an update on the Regional Water Plan Seed Grant Funding for 2021 was given. The current seed grant cycle is open with a process similar to years past. There is a mandatory pre-application meeting on October 16th and applications must be postmarked by October 31st. The PC is available to help with facilitating the process and encourages Council Members to reach out if anyone has an idea they would like to pursue.

Dr. Gary Hawkins then gave the attendees an overview of the seed grant project he has been working on involving the implementation of three management practices. One aspect is looking at nutrient loading and erosion in the watershed, so this summer was spent working with conservation tillage. Virtual meetings have been held to discuss conservation tillage. Dr. Hawkins also worked with the Georgia Golf Course Association superintendent to present a nutrient and Best Management Practice (BMP) focused webinar. Additionally, blueberry monitoring is being conducted to understand how nutrients are moving through the soil and into the water.

Dr. Hawkins has also been looking at the issue of homeowners who are self-supplied by private wells and/or have septic systems, and how to maintain and protect those systems. Dr. Hawkins offered to get Council Members involved in the meetings if there is an interest. There are two septic presentations that can be sent out to the Council and two webinar sessions in October.

Comment: Chairman Jeffords stated there is an interest in these programs as most of the region uses personal wells and septic systems.

Response: Dr. Hawkins will send the PC program information for it to be distributed to the Council.

During the last cycle, Rahn Milligan prepared a Seed Grant application for agriculture and livestock best management practices. The application is being funded through the 319(h) Program and is currently going through the contracting process.

5) Next Steps/ Public Comments/ Local Elected Official Comments

Comment: O'Tania Jenkins with Georgia 811 commented that they work closely with the public service commission and offer free classes.

Comment: Nancy Bobbitt, Regional Director with US Senator Kelly Loeffler, offered a helping hand if the Council needs anything.

The discussion then turned to the next meeting as EPD stated the meetings next year will be focused on Technical Work and getting new appointments engaged in the process. Chairman Jeffords stated he would like to wait until after the beginning of 2021 to hold the next meeting. Chairman Jeffords expressed his preference for the next meeting to be held in person and hopefully new appointments will be made by then.

The meeting was adjourned at 1:00 PM.

6) Meeting Attendance

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

Affiliation	Name
<i>Altamaha Regional Water Planning Council</i>	Brian Mooney
	Lindsay Thomas
	Ed Jeffords
<i>Regional Water Planning Council Planning Contractors</i>	Danielle Honour Bill Davis Emma Sutherland
<i>Georgia EPD</i>	Jennifer Welte
<i>Public/Agency Attendees:</i>	
Altamaha Coastal Keeper with Altamaha River Keeper	Susan Inman
City of Cochran	Richard Newbern
	Willie Farrow
Georgia 811	O'Tania Jenkins
Georgia Farm Bureau	Alex Bradford
Georgia Forestry Commission	Matthew Mrizek
Heart of Georgia Altamaha Regional Commission	James Pope
Regional Director, US Senator Kelly Loeffler's Office	Nancy Bobbitt
Regional Representative, Congressman Rick Allen's Office	Zach Stokes
University of Georgia	Dr. Gary Hawkins
Southeastern Technical College	Barry Dotson
Southern Company	Daniel Carter
USGS	Greg Cherry