

Memorandum

To: Middle Ocmulgee Regional Water Planning Council

From: Laura Hartt and Michelle Vincent, Jacobs

Date: April 13, 2021

Subject: Middle Ocmulgee (MOC) Regional Water Planning Council Meeting Summary

Welcome and Council Business

Chairman Elmo Richardson called the meeting to order and welcomed the Council and other attendees. Prior meeting minutes from meetings held June 6, 2019 and August 4, 2020 were presented for approval. The Chair asked for a motion to approve. Motion and second provided, and motion carried without dissent.

The Chair presented the proposed agenda and asked for a motion to approve. Motion and second provided, and motion carried without dissent.

EPD Updates

Appointments – Veronica Crow (EPD)

Veronica Crow (EPD) gave the Council a brief update on the status of new appointments across the state, noting there were no updates for Middle Ocmulgee Council and that many of the other Councils were also waiting for new appointments. Ms. Crow indicated that current MOC members may be contacted by the Governor's office and asked to fill out a form to support their reappointment to the Council. Once appointments have been made, EPD will work with the Chair and Planning Contractors to provide an orientation for the new Council members.

Question: Can Council put forward names?

- Veronica Crow: A list of interested persons has already been prepared for the appointing entities.
- Jennifer Welte: EPD is working with the Governor's, Lieutenant Governor's, and Speaker's offices on nominations, so members can certainly forward names to EPD or may reach out directly to those offices.

Comment: Council Member John Bembry recommended a replacement for Jerry Davis to his County Commissioner who in turn has forwarded that recommendation.

Other Planning Updates –Veronica Crow (EPD)

Ms. Crow gave the Council an update on the next steps in the regional water planning process as follows:

- Draft plans will be ready for public notice and comment by September 2022 and finalized by December 2022.
- Council meetings will occur on a quarterly basis, with up to two meetings anticipated for the remainder of the 2021 calendar year.
- Technical work began in 2020 to support planning efforts, including population projections, forecasting, and resource assessments.
- Preliminary projections as well as forecasts for the municipal, industrial, energy, and agricultural sectors have been provided to the Council.
- During the current meeting, EPD will provide an update on the resource assessments for surface water availability and groundwater availability.
- During a future meeting, EPD will update Council on resource assessments for surface water quality.

BEAM modeling effort – Dr. Wei Zeng(EPD)

Dr. Wei Zeng (EPD) presented an overview of a new model, the Basin Environmental Assessment Model (BEAM). Dr. Zeng noted that prior models were essentially big basin-wide models encompassing the few nodes that have hydrologic information available (i.e., USGS gage data). BEAM adds more nodes by incorporating information relating to permitted entities (e.g., withdrawals and discharges).

To demonstrate BEAM, Dr. Zeng presented a hypothetical scenario involving the addition of a new industrial demand to the Ocmulgee Basin. In doing so, he was able to demonstrate the hypothetical impact the addition of a new industrial facility would have on lake levels and downstream flows. BEAM also allows for the evaluation of other metrics, including boating conditions and fish habitat.

See Meeting Presentation slides for more details about BEAM.

Metropolitan North Georgia Water Planning District (MNGWPD) Update

Danny Johnson (Atlanta Regional Commission) gave the Council an update on the status, progress, and schedule for the next update of the MNGWPD (the “District”) Water Resource Management Plan. Mr. Johnson noted that the District’s schedule for updates aligns with that for the other regional councils, i.e., the final updated District plan is scheduled to be ready for Governing Board approval by December 2022.

Mr. Johnson also noted that while other regional councils were slightly ahead in terms of completing their forecasts, the District would be “caught up” by the end of summer or early fall. He further noted that the District was updating facility plans and River Basin Profiles and would be conducting stormwater forecasting for the first time.

Finally, Mr. Johnson provided some details concerning the water conservation and efficiency elements in the District’s draft plan, including:

- reduction of long-term per capita demands by requiring use of proven water efficiency technology;
- preparation of a menu of optional programs utilities can use to implement EPD’s Drought Rule;
- promotion of voluntary, early adoption of new water efficiency technologies;
- development of a new water waste ordinance;
- consideration of other rebate/incentive programs; and
- promotion of whole home water efficiency.

Mr. Johnson concluded by reminding members of the ongoing Basin Advisory Council membership drive.

Seed Grant Updates

Microplastic Project (Dr. Krista Capps, UGA)

The initial study and seed grant funding focused on bromide testing to locate a potential source for bromide detected in Butts County’s drinking water system. Initial sampling and investigations were not able to locate any sources of bromide in the watersheds, so with the Council’s permission, and implemented through EPD’s Grants Unit, the study’s focus shifted from bromide to microplastics, an emerging contaminant of concern in many watersheds. Microplastic sampling is much more time intensive, so fewer sampling sites were included in the updated study.

The project included convening a workshop in collaboration with regional partners (including the Tennessee Aquarium) to review the current state of science on microplastics. The project also involved sending an undergrad to a conference/workshop in California to learn how to quantify microplastics. During the project, samples were collected, filtered, re-filtered, counted, recounted, and then a subset was sent to the Tennessee Aquarium to assess microplastics concentrations.

This seed grant project’s period ends in May 2021, but UGA will continue sampling through June using other funding. The project expects to have results by the end of summer, before moving in to work focused on the South River.

Council member Marci Seleb shared a comment that Dr. Capps and the project have been so much help to Butts County and the region, and they are very much looking forward to seeing South River results.

Dr. Capps noted that continued development upstream will potentially lead to an increased presence of microplastics downstream. She also noted that working with microplastics is very time consuming and expensive, so any future work would need to take into account the time and funding it takes to do this work, and critically assess the methods and quality control being used due to the ubiquitous nature of plastics in our environment.

General Seed Grant Info

Veronica Crow (EPD) provided an update for the next round of Seed Grant awards. She noted that the application timeline will be the same as last year, i.e. Seed Grant application solicitation will be announced in July with an application deadline of October 31, 2021.

Michelle Vincent (Jacobs) encouraged Council members to start thinking about Seed Grant ideas for discussion at the next Council meeting.

Break

Forecasting Updates

Municipal Forecasting results – Brian Skeens (Jacobs)

Brian Skeens (Jacobs) gave the Council an update on the Municipal Forecasting efforts. He presented information on the methodology used to calculate water demands and compared the current demand forecasts with those from prior planning periods.

Mr. Skeens explained that the results incorporate county-to-county transfers and accounts for industrial use that relies on municipal water supplies. For each county, per capita estimates of municipal water use were derived from EPD's annual water audits. Mr. Skeens noted that the expectation is that overall per capita use will decline over time as plumbing codes are revised to reflect more efficient standards.

Comment from Mark Wyzalek (Macon Water Authority): Mr. Wyzalek noted that their utility gets requests from new industries, as many as 4 or 5 requests at one time. Because of all of these requests, Mr. Wyzalek questions whether the demand forecasts for Bibb County fall short by 1-2 MGD given all the requests his agency has received.

Results of the municipal forecasting effort may be viewed here:
<https://waterplanning.georgia.gov/forecasting/municipal-water-use>.

Industrial and Energy Forecasts – Bill Davis (CDM Smith)

Bill Davis (CDM Smith) gave an update on the Industrial and Energy Forecasting efforts.

Industrial

An advisory group comprised of stakeholders from a broad array of industries helped inform the forecasting effort. Stakeholders determined that industrial demands should

remain constant over time because of improved efficiencies and automation; however, stakeholders also noted the need for the forecasts to account for additional water demands whenever new, large facilities came online.

Results of the industrial forecasting effort may be viewed here:

<https://waterplanning.georgia.gov/forecasting/industrial-water-use>

Energy

A stakeholder group was convened to inform the energy forecasting effort. The process involved a top-down approach, where energy demand was determined at a state level and then allocated regionally according to forecasted need. The list of energy facilities was updated and assumes that Plant Scherer will be retired by 2040.

Mr. Davis noted that overall energy demands for the state are lower than they were during prior planning iterations. He also noted that although the demand for nuclear energy is expected to increase over time, the demand for coal-based energy is expected to decrease as coal-fired power plants are likely to be phased out sometime around 2030. Meanwhile, production of natural gas and renewable energy is likely to increase, helping to offset any unmet demands. The composition of energy supplies will determine future water demands because some supplies (e.g., nuclear and coal plants) consume more water during power generation than others (e.g., hydro, gas, renewables).

Results of the energy forecasting effort may be viewed here:

<https://waterplanning.georgia.gov/forecasting/energy-water-use>

Agricultural forecast updates (Mark)

Mark Masters (Georgia Water Planning and Policy Center) gave an update on the Agricultural forecasting efforts. Mr. Masters noted that the University of Georgia updated the state's wetted acreage database in 2020 and has modeled crop projections through 2060. He further noted the availability of field observation data to help with ground truthing.

Mr. Masters indicated that the Middle Ocmulgee region has not seen much change in animal agricultural water use, noting only a slight increase relating to horses and beef cows. He also noted a slight decrease in container, inground, and green house water use. He showed that the bulk of irrigated acres are in Pulaski, Peach, and Houston counties, with the majority of increased irrigated acreage attributed to groundwater irrigation. Meanwhile acres irrigated by surface water have decreased by 9% from 2010-2015. This trend is due in part to the shift from traveler systems and solid set systems to center pivot irrigation, which is more efficient.

Final results for the agriculture forecasts are still pending, will be shared with the Council at a future meeting, and will be posted here when available:

<https://waterplanning.georgia.gov/forecasting/agricultural-water-use>.

Wrap Up and Next Steps

The Council and the Planning Contractors discussed next meeting dates, targeting late summer and late fall. Ms. Vincent noted that many councils are looking at hybrid approaches with some in person and some virtual options. Ms. Vincent asked if any Council members have any topic or speaker ideas, or requests for information to be presented to the Council, to please send them to her in early July.

Public Comments/Local Official Comments

Chairman Richardson asked if there were any public comments. There were none.

The meeting adjourned at approximately 12:21 pm.

Meeting Participants

Council Members

- Elmo Richardson (Chairman)
- Ben Copeland, Jr. (Vice-Chair)
- Jason Briley
- Mike Bilderback
- Robert Dickey
- Tony Rojas
- Marci Seleb

EPD

- Jennifer Welte
- Veronica Craw
- Dr. Wei Zeng

Contractors

- Laura Hartt (Jacobs)
- Michelle Vincent (Jacobs)
- Ashley Reid (CDM Hill)
- Bill Davis (CDM Hill)

Public/Agency Partners

- Mark Wyzalek (Macon Water Authority)
- Brandon Baker (GA-DNR)

- Chris Stanley (Newton County)
- Courtenay O'Mara (Southern Company)
- Danny Johnson (MNGWPD)
- Deon Tucker (Southern Company)
- Greg Cherry (USGS)
- Jaime Painter (USGS)
- John Joiner (USGS)
- Liz Fabian (Mercer University)
- Melissa Crabbe (Southern Company)
- Mike Hopkins (Newton County Water and Sewerage Authority)
- Paul McDaniel (GA Forestry Commission)
- Sarah Nottingham (City of Perry - Stormwater)
- Dr. Krista Capps (University of Georgia)