

Memorandum

To: Middle Ocmulgee Regional Water Planning Council

From: Laura Hartt and Michelle Vincent, Jacobs

Date: September 29, 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. The April 13, 2021 meeting minutes were presented for approval. Pending confirmation of a quorum, meeting minutes were approved. The Chair presented the proposed agenda and asked for a motion to approve. Motion and second provided, and motion carried without dissent.

Forecasting Updates

Michelle Vincent briefly discussed the quarterly newsletter. Chairman Richardson commented that it was useful. Ms. Vincent affirmed that the Council would receive future quarterly newsletters.

Forecasting Status Update – Michelle Vincent (Jacobs)

Michelle Vincent (Jacobs) provided a brief overview of forecasting efforts to date for municipal, industrial, and energy uses, summarizing the results.

Mark Wyzalek: Noted that these are forecasts, and that Macon Water Authority gets a lot of requests for new industrial projects, which poses an unknown in terms of economic and industrial growth.

Ms. Vincent: Responded that these forecasts are based on best data available, and the plans are updated every five years to accommodate that.

Mr. Wyzalek: Noted he hopes EPD will keep the industrial uses in mind in terms of water withdrawal permits.

Results of the forecasting efforts may be viewed at the following links:
<https://waterplanning.georgia.gov/forecasting/municipal-water-use>.

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

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

Agricultural forecast update (Mark Masters, GWPCC)

Mark Masters (Georgia Water Planning and Policy Center) gave an update on the agricultural forecasting efforts. He first summarized the methods for determining wetted acreage, crop projections, crop water needs, and animal agriculture and nursery use. He noted that the prior assumption that surface water demand was 70% of that of ground water demand was no longer valid. Current forecasts no longer assume any difference.

He then summarized the results for the Middle Ocmulgee region, noting that pecans and cotton were the most prominent crops. He emphasized the need to account for crops that are static (e.g., pecans) and those that are rotated (e.g., cotton) when determining water demands. Annual average demand for 2020 was just under 90 MGD, but can vary from 90 to 260 MGD during the growing season, depending on rainfall. The 2060 forecast is 145 MGD across all agriculture uses.

Rep. Robert Dickey: Noted he was amazed at the detail and amount of data collected. He noted that the information might not be as important for this council as other councils. He then asked, "Are you assuming more acres or more water needed on acres?"

Mark Masters: Responded that the pattern is mostly driven by acres, based on economic models he has access to. It's still a bit of a guess as to what we are going to grow in 40 years, but the forecast is based on best available information. We do have a good handle on how price trends translate into producers growing more acreage rather than using more water/ crop acre.

Results of the agriculture forecasting efforts may be viewed here:

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

Chairman Richardson: Thanked Mr. Masters and turned the meeting over to Ms. Veronica Craw (EPD).

Trash Free America Initiative – SE Atlantic Strategy

Veronica Craw (EPD) provided the Council with an introduction to the Trash Free America Initiative on behalf of Christopher Plymale (EPA Region 4) who could not attend due to illness. More information about the program is available here:

<https://www.epa.gov/trash-free-waters>

Chairman Richardson: Noted the similar initiative for the South River above Lake Jackson and asked if that program was still in operation.

Ms. Crow: Responded that she believed the project was still active. She reminded the Council that a Seed Grant proposal had been submitted and approved to fund the installation of a litter trap on the South River. However, the County decided to fund the project in full, so the Seed Grant award was no longer needed. It was Ms. Crow's understanding that the litter trap had been installed, but she had not received an update yet. Ms. Crow offered to provide the Council with an update on the project at the next MOC meeting.

Chairman Richardson: Suggested including an update on the installation and operation of the litter trap in the next MOC newsletter.

Danny Johnson (MNGWPD): Noted that a public notice had gone out back in May for a buffer variance associated with the project, so the project probably is well along. He suggested contacting Dr. Jackie Echols (South River Watershed Alliance) to get an update.

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. Current update efforts have focused on forecasting, based on data collected from water providers around the region. Currently, the District is looking at facility expansion planning through 2040 and anticipates releasing a draft report for public review by November or December. Mr. Johnson offered to provide the draft to the Council as well. That report will include forecasts for water supply, which Mr. Johnson offered to summarize for the Council when he provides his next update.

Mr. Johnson briefly described the stormwater forecasting being conducted, noting that it is perhaps the first of its kind done nationally. The forecasts will determine total runoff volume at a watershed scale. County-level fact sheets will be available later this fall.

Action items that the District will be including in their new plan include water efficiency improvements through plumbing code update, updates to the water waste ordinance, expanding the rebate program to include smart irrigation controllers and smart leak detection, and whole house efficiency/certification. Mr. Johnson emphasized that a cost-benefit analysis was being performed to weight the various action item options.

Mr. Johnson summarized a partnership with Georgia Public Broadcasting, Live Exploration, on an educational event called Georgia's Water. More than 79,000 people viewed the live stream. The cost for the program was \$16,000. The program included interviews with water professionals. He encouraged the Council to share with any educators. More information is available here:

<https://www.gpb.org/education/liveexplorations/water>.

Mike Bilderback: Asked how the cost-benefit analysis was performed for changing plumbing codes to improve efficiency.

Mr. Johnson: Responded that following the initial analysis, most water efficiency action items showed strong benefits relative to costs. He further noted that some benefits are more difficult to assess quantitatively, and must be assessed qualitatively (e.g., environment, drought resiliency).

Mark Wyzalek: Given that customers may be using less water while cost of supplying that water goes up, what does the District recommend as far as lowering customer bills when there are still fixed costs associated with providing water?

Mr. Johnson: Acknowledged it was a challenge and that the District is only addressing variable costs not fixed costs associated with water supply. However, he did note that some fixed costs will decrease, such as use of chemicals and energy to treat water. Moreover, the District relies on the AWWA audits to derive variable production costs, and the software does allow for the inclusion of savings due to lower capital costs associated with foregone or diminished plant expansions.

Break

Surface Water Availability

Dr. Wei Zeng (EPD) provided an update on the Basin Environmental Assessment Model (BEAM), reminding the Council that the model is still in pilot development. Once the surface water demand forecasts are updated and integrated for adjacent regions, including the Metro District, the model will be ready for full use.

Dr. Zeng reminded the Council that the current BEAM has greater spatial resolution compared to the ResSim model used during the prior planning period. He then presented examples of model node inputs, including flows at river gages, elevation in reservoirs, and simulated water withdrawals. He emphasized that any existing instream flow protection thresholds are satisfied first before examining other water uses/needs.

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 that 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 performance and fish habitat.

Dr. Zeng then asked the Council if they had any additional performance measures they would like to use.

Ms. Vincent: Reminded the Council that current performance measures include habitat and recreation. She then asked Dr. Zeng if he had any suggestions for the Council.

Dr. Zeng: Noted that in other basins, ecological measures are a focus.

Ms. Laura Hartt: Asked if there were any water quality related measures that might be of interest to the Council.

Dr. Zeng: Stated that Dr. Liz Booth (EPD) was probably the staff person who could best answer that question. Dr. Zeng noted that the model could be used for determining whether minimum flow thresholds were breached for a given management scenario.

Mr. Wyzalek: Asked if the Council should consider a study committee to have an internal discussion regarding appropriate further metrics needed.

Chairman Richardson: Agreed that a study committee might be a good idea.

Ms. Vincent: Noted that subcommittees have been used in other planning efforts and offered with we've used subcommittees for other efforts. She offered to work with the Chairman to put together such a subcommittee.

Ms. Vincent: Asked if BEAM addressed the effects of flow on temperature?

Dr. Zeng: Responded that Ms. Booth would be the person to answer that question.

Seed Grant Potential Projects for 2021

Ms. Vincent (Jacobs) notified the Council that the final report for the Butts County's 2017 Seed Grant project, Bromide Concentrations in Surface Drinking Water Sources for Butts County, was complete. Council members may access it here:

<https://waterplanning.georgia.gov/events/2021-09-29/middle-ocmulgee-regional-water-planning-council-meeting-september-29-2021>

Ms. Vincent then reminded the Council that applications were now being accepted for the 2022 Seed Grant awards. Pre-application meetings are to be held by October 15, with the final application due by October 31. She listed potential partners who might be interested in pursuing Seed Grants and what activities were eligible. She then opened up the meeting for project ideas.

Chairman Richardson: Noted that meeting participation was insufficient to generate input. He then asked Council Member Mike Hopkins if he had any ideas, given so much was going on in his region.

Mr. Hopkins: Replied that a pharmaceutical company was considering piloting a reuse project, which could be a candidate for next year given that this year's deadlines had nearly passed.

Ms. Vincent: Offered her assistance as needed.

Ms. Crow: Noted that the meeting on the 15th is really informal and does not have to include a presentation of the exact project that is ultimately proposed by October 31st.

Chairman Richardson: Asked if there was anything new to report on appointments to the Council.

Ms. Jennifer Welte: Replied that EPD was working with the appointing officials to advance recommendations for appointments and reappointments. She noted that some nominees had been acted upon, but the MOC and some other Councils were still waiting. Appointments are still anticipated by the end of the year.

Ms. Vincent: Advised the Council to forward Seed Grant information to anyone who might be interested.

Wrap Up and Next Steps

Ms. Vincent summarized the upcoming planning schedule, suggesting December 2021/January 2022 for the next MOC meeting. She then asked the Council to forward potential agenda items to her. Ms. Vincent will send out a poll to help determine the date and will reschedule both the EPA and the Ocmulgee Mounds National Historical Park speakers.

Public Comments/Local Official Comments

Ms. Vincent asked if there were any public comments.

Chairman Richardson thanked the participants and then asked if it was possible to share the newsletter with local officials.

Mr. Dickey: Agreed that engaging local officials was important but an uphill battle and that sharing the newsletter would help.

Ms. Vincent: Agreed to follow up with EPD, and ACCG/GMA as necessary to get a contact list to distribute the newsletter.

The meeting adjourned at approximately 11:50.

Meeting Participants

Council Members

- Elmo Richardson (Chairman)
- Ben Copeland, Jr. (Vice-Chair)

- Mike Bilderback
- Cassandra Cox (proxy for Ron Shipman)
- Robert Dickey
- Larry McSwain
- Mark Wyzalek (proxy for Tony Rojas)

EPD

- Jennifer Welte
- Veronica Crow
- Dr. Wei Zeng

Contractors

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

Public/Agency Partners

- Mark Masters (GA Water Planning & Policy Center)
- Danny Johnson (MNGWPD)
- Mike Hopkins (Newton County Water and Sewerage Authority)
- Paul McDaniel (GA Forestry Commission)
- Peggy Wilmer (Macon Mill)