Memorandum

To: Middle Ocmulgee Regional Water Planning Council

From: Laura Hartt and Michelle Vincent, Jacobs

Date: January 12, 2022

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

Welcome and Council Business

During check in, Larry McSwain noted that a person he had recommended for the Council would not be able to join due to health reasons but that he had another recommendation. He then asked if any progress had been made on appointments. Chairman Elmo Richardson noted that as a topic to be discussed on the agenda.

Chairman Richardson called the meeting to order and welcomed the Council and other attendees. The September 29, 2021 meeting minutes were presented for approval. Pending confirmation of a quorum, meeting minutes were approved. Chairman Richardson presented the proposed agenda and asked for a motion to approve. Motion and second provided, and motion carried without dissent.

EPD Updates (Veronica Craw)

Veronica Craw provided a brief update on Council appointments, noting that EPD was still awaiting notification of reappointments and new appointments. Once new members are appointed, EPD will coordinate with the Council's planning contractor on orientation of any new members.

Ms. Craw then provided an update on the planning review and revision process, including the timeline and technical work (i.e., forecasting, resource assessments, gap analysis). The Regional Water Plans are scheduled to be reviewed and adopted by EPD's Director by December 2022.

- Question (John Bembry, Council Member): Does one of the new nodes include Hawkinsville?
- Response (Wei Zeng, EPD): If there is a USGS gage there, then yes. We have included more nodes than we did previously, with nodes now including USGS gages, discharges points, withdrawal locations, and reservoirs.
- Question (Mr. Bembry): Then I assume we have a node there. Can we see it on a map?
- Response (Dr. Zeng): Yes, can provide a detailed map of all node locations.

John Joiner (USGS) confirmed in the meeting chat that USGS has a gage on Ocmulgee River at US 341 at Hawkinsville (Gage number 02215000).

Review Vision and Goals 2022 (Michelle Vincent)

(See attached *Adopted Vision and Goals for the Middle Ocmulgee Planning Region* document in track changes for alternations made by Council. All changes were agreed to by consensus and adopted by the Council.)

Michelle Vincent (Jacobs) reviewed the Council's current Vision. Council members agreed that the current vision is fairly comprehensive and didn't need any substantive changes. Mr. Bembry shared that the new National Park Service designation in Macon (Ocmulgee Mounds) is a big deal, so our vision and goals should align with that. Mr. Rojas suggested that recreation is included in "enhanced quality of life." Chairman Richardson agreed that recreation is implied. Mr. Rojas commented that the Vision becomes very specific at the end, focusing on "region's citizens" and suggested we could expand that. Mr. Bembry suggested removing "the region's citizens" and ending with "enhanced quality of life for all". Council Members agreed by consensus to that wording adjustment.

Ms. Vincent recorded the changes to the current vision and reiterated that the vision could be revisited at a later date if any changes are needed.

The Council discussed and reviewed the Council's current Goals. Council Members discussed whether the goals support Mr. Bembry's question regarding the NPS designation.

Chairman Richardson guided discussion on the remaining Goals, beginning with Goals 1 and 3. Larry McSwain (Council Member) suggested that Goals 1 and 3 seem redundant. Chairman Richardson: Goal 3 looks at the future, additional supply needs. Mr. McSwain suggested wording "promote additional supply for region as needed." Mr. Rojas suggested combining the two goals together. Mr. Bembry stated that water supply can be increased through conservation. Where else can we get it? Ms. Seleb clarified that existing means what we have access to. That could include access to a river and needing a treatment facility. Ms. Seleb suggested removing the word "existing"? The Council agreed to change Goal number 1 to "maximize water supply sources to the extent practicable to promote sufficient water supply to the region," and to delete the previous Goal 3.

The Council Members discussed Goal 2 including the value of stream integrity and ecosystem benefits. Mr. Rojas asked if we support natural stream integrity other than in terms of recreation. Mr. Bembry added that natural stream integrity also protects water quality. Mr. Rojas suggested inserting "ecosystem," and Laura Hartt (Jacobs) offered that the concept of "ecosystem benefits" could be inserted to capture those ecosystem services. Council Members agreed by consensus to wording changes as indicated.

The Council Members discussed Goal 4, with Mr. McSwain proposing to insert the word "conservation." Council members agreed to that insertion by consensus.

The Council Members agreed members to leave Goal 5 as is by consensus.

The Council Members discussed Goal 6. Mr. Rojas suggested we should add "stormwater management." Mr. Bembry agreed. Jennifer Welte (EPD) suggested considering the word "enhanced." Council members agreed by consensus to add "enhanced stormwater management" to the goal.

The Council Members discussed Goal 7. Mr. Bembry asked if the goal is redundant based changes to the other goals? Mr. Rojas expressed that this final goal does pull it all back together. He also suggested inserting "comprehensive" before "planning." Council Members agreed to that change by consensus.

Metro North Georgia Water Planning District Updates (Danny Johnson)

Danny Johnson (Metro North Georgia Water Planning District) provided an update on the District's plan update schedule. The District is currently working on finalizing the plan's action items.

Mr. Johnson noted that the only new action items in the plan are five focused on water conservation:

- New residential customer leak reduction programs
- New plumbing code efficiency requirements
- Updated landscape irrigation system efficiency requirements
- Update drought response ordinance requirement
- Update water loss control program

Mr. Johnson offered to provide the Council with a draft document outlining these measures in more detail.

Mr. Johnson then provided the Council an overview of the stormwater forecasting effort.

- Question (Chairman Richardson): What percentage of local governments in the District have stormwater fees imposed?
- Response (Mr. Johnson): Many cities and counties do. Some use property taxes.
 Some are interested in imposing fees but find it politically difficult. The City of Atlanta has tried for years. Cobb County is considering it. Stormwater fees are very beneficial if you are a stormwater manager because they provide a steady stream of funding.
- Response (Chairman Richardson): Bibb County started in January 2022 to collect stormwater management fees. This encourages areas with large impervious potential to minimize runoff because they can get credits. This model should work up in the District area given all the impervious surfaces.

- Response (Mr. Johnson): The District does recognize stormwater fees as a best management practice.
- Question (Mr. Rojas): Not everyone is funding stormwater management. Does the District have a good inventory of efforts?
- Response (Mr. Johnson): The post-development stormwater management ordinance has been in place since 2003, and all subsequent development has had to apply best practices.

Mr. Johnson then briefly discussed the next steps and timeline for the District's plan update. Please see presentation slides for more information.

Surface Water Availability (Dr. Wei Zeng)

Dr. Wei Zeng (EPD) discussed the BEAM modeling results, emphasizing the model's capability of analyzing water supply challenges, Lake Jackson conditions, and Macon river flows.

Dr. Zeng confirmed that Hawkinsville is a node in the model.

Dr. Zeng then described the model's baseline settings, which use the simulation period of 1939-2018. Water withdrawals and discharges were averaged across the 2010-2018 time period, which represents water use during marginally dry conditions. Instream flow protection thresholds that apply to surface water withdrawal permits, and reservoir physical and operational data also were incorporated into the model.

Dr. Zeng presented examples of baseline conditions for selected nodes and discussed several metrics for evaluating performance. Potential water supply challenges is a metric, and at times that metric is not met. For example, for the City of Forsyth's surface water withdrawal, instream flow protection requirements have to be met. The City has been cited by EPD for failing to satisfy those requirements. BEAM does confirm a potential supply challenge for the City.

- Question (Mr. Rojas): Does this mean we might see shortages during drought if we have to meet instream flow requirements?
- Response (Dr. Zeng): That is my interpretation. I have one cautionary note. We try to replicate natural flows, but we may not capture those flows perfectly.
- Question (Mr. Rojas): When was Lake Jackson built?
- Response (Dr. Zeng): Before 1939.
- Response (Chairman Richardson): Long before 1939.
- Response (Ms. Seleb): 1911.

Chairman Richardson noted that there was some discussion in 2010-2011 for Forsyth to have a tie in to Macon during shortages. Mr. Rojas noted that the Macon Water Authority does sell water to the City.

Chairman Richardson also noted the lack of storage in Lake Jackson, wondering if it has been dredged. Dr. Zeng is aware there has been some discussion concerning dredging. Ms. Seleb noted that the Lake has not been dredged and that the permit was reapproved this past year.

Dr. Zeng then reviewed the City of Monticello's potential water supply challenges, followed by an example recreational metric, which evolved into a Council discussion of performance metrics.

- Comment (Mr. Rojas, referring to the recreational metric): I have been out on the river at flows of 200 and 300 cfs. It's low, but not impassible.
- Response (Ms. Welte): We'll recheck the information collected during the flow regime pilot study to see if some of that detail was already provided. Otherwise, EPD will ask Kathleen O'Neal (Ocmulgee Outdoor Expeditions).
- Response (Mr. Rojas): She will have more information than anyone. I would be interested in knowing why those flows are the criteria.
- Question (Ms. Vincent): Could we add more qualitive information regarding good, average, and poor recreational days rather than just presence or absence?
- Question (Mr. Joiner): Would having bank-full characteristics be informative?
- Response (Dr. Zeng) Possibly, depending on the stream reach.
- Question (Mr. Rojas): Could we add approximate gage height to output information, so we don't have to go back and forth?
- Response (Dr. Zeng): Yes.
- Question (Ms. Craw): Do we want to adopt this metric?
- Response (Mr. Bembry): When looking at flows and river heights, Hawkinsville and Macon are very different. It is not appropriate to use the same metric for the entire stretch of the river.
- Comment (Mr. Rojas): I would like more information about the basis for setting this metric.
- Response (Dr. Zeng): These are points well taken. Evaluating a recreational metric at Hawkinsville would require local knowledge to develop additional measures.
- Response (Mr. Rojas): The assumption seems to be that if you intend to meet the metric, looking at Georgia Power needs, you won't get close to six feet.
- Response (Dr. Zeng): Georgia Power operations is an important parameter effecting
 flow, but the project is going through relicensing. If stakeholders have an interest in
 changing the operations, there is a process going on to allow for input. Even if you
 don't change the operations, we can look at the baseline and have a balanced
 assessment capturing both interests and determine if the trade-off is a good one.
- Comment (Mr. Rojas): We should have metrics for fishing and aquatic life as well.
- Response (Dr. Zeng): I have a slide on that.
- Question (Chairman Richardson): Can we get some of the recreation information brought back to the next council meeting?
- Question (Dr. Zeng): We had limited participation from stakeholders during the pilot study. I wonder if the Council could ask local experts to share information with EPD, particularly outside Macon?
- Ouestion (Ms. Seleb): Can you show us the list of experts?

- Response (Dr. Zeng): I will send a copy of the prior report.
- Response (Mr. McSwain): We need to include this metric.
- Response (Dr. Zeng): It sounds like the Council agrees to the type of metric, but it might need further refinement.
- Question (Ms. Vincent): Do we want to include boat ramp/launch access as a metric?
- Response (Mr. McSwain): It would be helpful if the information is available.
- Response (Mr. Bembry): Joe Cook's book on the Ocmulgee is a good reference.

Ms. Welte requested a time check. Ms. Vincent noted that the group was running a little behind schedule.

Dr. Zeng then reviewed an example ecological metric and asked the Council for their input on the use of fish habitat as a performance metric.

- Question (Mr. Rojas): We need the metric, but are the values correct? Are the differences between Macon and Hawkinsville reflected? If the dam is locked into operations, how else can we meet these metrics other than through permits? How much can you move the needle?
- Response (Dr. Zeng): We do have additional locations because UGA has collected information.
- Question (Mr. McSwain): Have the fish and wildlife folks been involved in evaluating the metric? If not, can we consult them?
- Response (Dr. Zeng): In stakeholder meetings, fish and wildlife colleagues were present, and they have received the report.
- Mr. Joiner offered USGS assistance in providing local information.

Chairman Richardson asked if there were any more questions. Hearing none, the Chairman introduced Dr. Liz Booth (EPD).

Surface Water Quality (Dr. Liz Booth)

Dr. Booth reviewed the 2020 305(d)/303(d) listed stream segments. She noted that approximately half were listed for pathogens (i.e., fecal coliform). She then reminded the Council that the bacteria criteria is changing from fecal coliform to *E. coli*.

Dr. Booth presented an overview of the surface water quality resource assessment process. She outlined the parameters of concern (biochemical oxygen demand, ammonia, total nitrogen, total phosphorus) as well as water quality standards (dissolved oxygen and chlorophyll a).

Dr. Booth next provided a summary of the past models used for the assessments and noted that the current model includes variable land use over time. The resource assessment model also relies on radar information to assess meteorological impacts on hydrology.

Dr. Booth explained how the modeling determines assimilative capacity and then identifies areas of concern. In general, the resource assessment model shows that water quality standards are being met with a few exceptions. Dr. Booth noted that although rivers in southern Georgia have lower natural levels of dissolved oxygen (DO), they may still meet water quality standards. Future permit limits can be set after assessing future assimilative capacity.

Regarding Lake Jackson's growing season, Dr. Booth noted a warming trend, leading to higher chlorophyll a levels. She stated that climate change is a reality that will need to be dealt with and may lead to permit changes in the future. Currently, Lake Jackson is not impaired, but may trend in that direction. Consequently, there is a need to address nonpoint source runoff/nutrients around Lake Jackson.

- Comment (Mr. Embry): Nitrogen and phosphorus impacts can be alleviated by improving buffers upstream.
- Response (Dr. Booth): Wastewater treatment plants that discharge into lakes also impact nutrient levels.
- Question (Mr. Bembry): W recently received a presentation showing a dramatic increase in microplastics. Is EPD looking into that?
- Response (Dr. Booth): Not at this time.
- Question (Mr. Bembry): What about pharmaceuticals?
- Response (Dr. Booth): EPD currently does not have water quality standards set for things like microplastics or pharmaceuticals. Drinking water facilities might examine those when they assess drinking water quality.

Trash Gate Installation in South River at Lake Jackson (Jaqueline Echols, Brent Zern)

Dr. Jacki Echols (South River Watershed Alliance) gave an overview of the history leading up to the Bandalong Trash Trap Project on the South River.

Brent Zern (DeKalb County) gave an update on the design, location, and operation of the trash trap. Mr. Zern noted that the County was waiting on the permitting process as well as supply chain resolution in order to complete the project.

Please see meeting presentation for more details.

Wrap Up and Next Steps

Ms. Vincent wrapped up the meeting by noting that the next meeting was expected in mid to late March and that the Council would be transitioning from Jacobs to a new planning contractor team (Freese & Nichols).

Public Comments/Local Official Comments

Chairman Richardson asked if there were any comments from the public or local officials.

Mr. Bembry noted that Seth Clark (Macon City Council Member) is now the director of the Ocmulgee National Park and Preserve Initiative (ONPPI).

The meeting adjourned at approximately 1:20 PM.

Meeting Participants

Council Members

- Elmo Richardson (Chairman)
- John Bembry
- Larry McSwain
- Marcie Seleb
- Mike Bilderback
- Tony Rojas
- Cassandra Cox (proxy for Ron Shipman)

EPD

- Jennifer Welte
- Veronica Craw
- Dr. Wei Zeng
- Dr. Liz Booth
- Feng Jiang

Contractors

- Laura Hartt (Jacobs)
- Michelle Vincent (Jacobs)
- Ashley Reid (CDM Smith)
- Andrea Druhot (Freese & Nichols)
- Jason Afinowics (Freese & Nichols)
- Paula Feldman (Freese & Nichols)

Public/Agency Partners

- Mark Wyzalek (Macon Water Authority)
- April Cunard (City of Byron)
- Brent Zern (DeKalb County)
- Danny Johnson (MNGWPD)
- Dr. Jacqueline Echols (South River Watershed Alliance)
- John Joiner (USGS)
- Katherine Atteberry (ARC)

• Paul McDaniel (GA Forestry Commission)