

Memorandum

To: Upper Oconee Regional Water Planning Council

From: Michelle Vincent, Jacobs

Date: February 23, 2023

Subject: Upper Oconee Council (UOC) Meeting

This memorandum provides the meeting summary of the Upper Oconee Regional Water Planning Council Meeting, held virtually on the Zoom meeting platform on February 23, 2023 from 1:00 PM to 3:00 PM.

1) Welcome and Council Business

Council Chair Melvin Davis called the meeting to order and welcomed the Council and other attendees. Roll was called. The Chair asked for motions and seconds to approve the April 14, 2022 draft Meeting Summary and the February 23, 2023 draft Meeting Agenda. Both were approved without dissent.

2) EPD Updates – Ania Truszczynski (EPD)

Dr. Ania Truszczynski (EPD) gave the Council an update from EPD, including the general timeline for regional water planning over the next few months. Plans will all go out for public comment on March 31, 2023. The Council will have a chance to review comments and any changes to the plan as a result of the comments and will finalize their plan and submit to EPD in June. EPD will adopt the plans in mid-June.

Seed grant applications for 2023 will be due in the fall. The Chair asked if each of the Council members would please approach their organizations and/or employers or contacts to encourage them to explore submitting an application. Mr. Davis asked if EPD and Planning contractors would send out a reminder out in July to have folks reach out municipal and/or public works and others to apply.

Dr. Truszczynski also gave an update on new permits issued in the Upper Oconee Region. Three new NPDES wastewater permits were issued, and one renewal permit was issued for the City of Tennille. There were several new groundwater permits, and no new surface water withdrawal permits.

EPD was also pleased to announce the completion of a new Water Quality Trading Guidance Document, finalized in February 2023. This document has been in development as part of EPD's efforts to create additional tools to address those areas that may have limited assimilative

capacity and create options for permittees who wish to expand their facilities. The Nutrient Trading Guidance document is explicitly discussed in several Regional Plans, including the Savannah – Upper Ogeechee, the Coosa North Georgia, and the Middle Ocmulgee. Now that the Upper Oconee Region has new chlorophyll *a* standards for Lake Oconee and Lake Sinclair, the guidance might be more relevant for nutrient management in the UO as well and could be an additional tool to reference in future planning efforts.

3) Council Schedule– Dr. Gail Cowie (GWPPC)

Dr. Cowie provided the Council with some details specific to the Upper Oconee Council plan development and meeting schedule and what needs to be completed moving forward. Dr. Cowie reminded the Council what sections the Council has reviewed and approved. To date the Council has approved the Vision and Goals, and the first two introductory and background sections. The Council has also reviewed and approved Section 4 – Forecasting. At this meeting, the Council reviewed Current Conditions – Section 3 and Future Conditions – section 5. Comments on these sections are due to the planning contractors by March 2 so they can turn around next draft and distribute it to the Council.

Section 6 - Management practices, Section 7 – Implementation, and Section 8 - Monitoring of Progress will go out to the Council for review on or near March 10. The entire plan review draft will go out to the Council prior to our March meeting, tentatively scheduled for March 23 or 24th. The March meeting will be an in-person meeting to review and approve the entire plan. The plan will then be submitted to EPD and will go out to public comment on March 31. (The Council briefly discussed conflicts and preferences for meeting dates in March.)

Public review and comment period is from March 31 – Mid-May. Comments received, any changes to the plan, and a complete draft of the plan will be bundled and sent out to Council by the end of May. The Council will then review the draft plan and adopt the final plan at a Council meeting **June 14 or 16**. (That meeting may be in person or virtual – depending on number of comments received and Council leadership's input.)

4) Surface Water Availability Resource Assessment – Gail Cowie (GWPPC)

Dr. Cowie gave the Council an overview of the Surface Water Availability Resource Assessment. She highlighted the changes with the intention of getting input from the Council. The assessments are based on updated demand forecasts. Of the Regional Water Plan technical work, the surface water assessment sections have the most new information.

One of the most dramatic new pieces of information related to the Surface Water Availability Resource Assessment is the new information resulting from the BEAM Model. The BEAM model incorporates hydrologic conditions from 1939 – 2018, and has nodes at all permitted withdrawal and discharge facilities as well as existing nodes from previous plan iterations (e.g., USGS gages). The nodes are where inputs and outputs are calculated. EPD also has new metrics that can be used to show “water availability challenges” - these are places in the region to pay attention in relation to water supply and availability, locally as well as regionally.

New metrics applied to water withdrawal facilities in the BEAM model include % of time with flows below the permitted instream flow protection threshold, volumes of shortage in drought periods, and total volume of shortage over the modeling period. For wastewater treatment facilities with direct stream discharges, there are two main metrics: % time below 7Q10 (7Q10 is defined as the lowest flow over 7-day average over 10 years) and total volume of shortage for the model period. Flows that fall below 7Q10 risk violations of water quality standards.

Dr. Cowie presented a summary of assessment results. Water supply challenges under current conditions in the region are detailed in Table 3-4. Of the 30 water withdrawal permits evaluated, there are four facilities with “challenges.” Of these, Social Circle’s challenge was very small, a “*de minimus*” condition – only 6 days over the 29-year period of record. The Winder and Statham challenges are more pronounced, but these communities are already working to address the issues and are developing new source - a new withdrawal permitting and development is in process. The fourth facility, Statham 007, has a permit associated with a reservoir. However, the size of the reservoir was unavailable, so EPD was unable to determine what actual storage is in the reservoir. There have been reports of siltation that has reduced available storage.

A total of 38 wastewater treatment facilities with direct discharges to streams were evaluated for wastewater assimilation challenges. Of these, potential challenges were seen under current conditions at 27 facilities. The full set of results is presented in Table 3-5 in the plan. Dr. Cowie presented an excerpt of the table to illustrate the metrics and their results. For most of the facilities, the percentage of time in the model period with flows below the 7Q10 was small, which is expected from natural flow variation. However, the percentages are markedly high for several facilities (>20% of the model period). Higher percentages indicate greater potential for violations of ambient water quality standards. GAEPD will use this information to guide communications with these facilities about future capacity and permit requirements.

Dr. Cowie also showed the information from the Regional Water Plan Implementation Seed Grant funded by EPD that is included in the draft plan. The seed grant was used to develop

information on instream uses such as fishing, boating, and aquatic life habitat in the Oconee River Basin.

Results from the grant project include metrics for boating and aquatic life habitat that could be considered by the Council in future review and revision of this plan. Dr. Cowie presented an excerpt from Table 3-6, which provides example metrics at each location. She noted that, pending Council feedback, the full list of metrics will be included in the draft plan in a new Appendix B.

5) Future conditions – Surface water availability

For the future conditions assessment, the forecasted water demand and wastewater discharge flows were used in the BEAM model. Results are presented in Section 5 in new tables with the same format used in section 3.

Thirty facilities were analyzed for water supply challenges under future conditions, as indicated by flows below the instream protection threshold in the permit for each facility. Of the 30 facilities, potential water supply challenges were seen at four facilities: Social Circle, two Statham facilities (including the same permit associated with a reservoir for which data are lacking), and a kaolin processing facility in Wilkinson County. Dr. Cowie noted that future challenges are more likely to be seen in dry years. These can be addressed through interconnections, enhancement of existing storage, and development of new sources.

For the wastewater results, potential challenges were seen at the same 27 facilities identified in the current conditions results. A key question for the future conditions results is: "Is there a substantial increase in the amount of time with a challenge in future, when compared with current conditions? That is, do results indicate that the problem will get worse?" Only eight facilities have an INCREASE in the % of time below 7Q10 in the future conditions results. However, the % of time with shortfall decreased for 19 facilities, because of projected increases in wastewater discharge in upstream facilities. From an implementation standpoint, it is better to focus on those 8 facilities.

Ground Water Availability Resource Assessments

Dr. Cowie touched briefly on Ground Water Availability Resource Assessments. For the current conditions, EPD compared the groundwater demand under current conditions with sustainable yield of the aquifers. The results indicate that the available groundwater is sufficient to meet demands in current and projected future demand.

Break

6) Surface Water Quality Resource Assessment – Michelle Vincent (Jacobs)

Ms. Vincent discussed the surface water quality resource assessments sections of both section 3 (current) and section 5 (future) of the regional water plan. She reviewed the dissolved oxygen sag (DOSAG) modeling results, including the maps of the region that show the amount of assimilative capacity available in water bodies under both current and future conditions. The DOSAG model is the same as was used in the last round of planning. Some additional streams have been added to modeled results, and numbers have been updated, but results are presented in same way. She noted that some stream segments appear to show lower assimilative capacity in the future, but not low enough to violate water quality standards. She also noted that some stream segments show improved future conditions due to assumptions regarding tighter permit limits.

Ms. Vincent also discussed the lake modeling results, focusing on the new nutrient criteria for Lake Oconee and Lake Sinclair. Each lake has three new criteria for three locations in the lake. EPD's model for future conditions assumes total phosphorus limits for all dischargers, including those currently lacking limits. Some additional information on EPD's work on nutrients in Lake Oconee will be incorporated into the next draft plan the Council reviews. Ms. Vincent presented the actual chlorophyll *a* data taken over the past recent years compared to the nutrient criteria. Exceedances of the criteria were seen in several of the locations in both lakes in 2019 and 2020.

Question: What happened in 2020 (to cause high levels of chl *a*)?

Answer (Dr. Cowie): 2019 and 2020 were wet years and nutrient loading from stormwater runoff is expected to be higher in wet years.

EPD: Yes, nutrient loading from stormwater runoff is higher in wet years and we saw similar results for 2020 in lakes all across the state. For Lake Oconee, we do know that some reductions in total P levels will be necessary in the permits for wastewater facilities that discharge above the lake.

EPD: This is also an example of where the new Water Quality Trading Guidance document can create opportunities for reductions or management of nutrients.

7) Revisions of Remaining Plan Sections – Gail Cowie – GWPPC

Dr. Cowie walked the Council through the schedule of revisions of the remaining sections of the plan. She discussed the contractor's recommended approach for reviewing and revising sections 6,7 and 8, pending the Council's feedback.

For the three sections: Section 6 – Water Management Practices, Section 7 – Implementing water management practices, and Section 8 – Monitoring and reporting progress, the planning contractors will update or annotate information that is outdated in each section, but will not update any management practices. Language similar to the following will be added to each section in locations as appropriate) to reflect the Council’s preferences for this plan revision: “Due to the number of vacant seats on the Council, the 2023 revisions of this section were limited to updates of dates or inaccurate information.”

Section 7 includes a table of estimated costs that was developed for the 2017 update, based on 2011 estimated costs. At this time, now 10+ years later, the numbers in this table are out of date. Costs associated with infrastructure and water planning are also currently very volatile, making realistic costs estimates challenging. The recommendation, after consulting with Council leadership, is to remove this table and specific costs, but include a reference to the 2011 guidance for use as appropriate. The planning contractors will provide information and/or links to the cost estimate.

Section 7 also includes the section of Recommendations to the State. Some alterations will be made to reflect the updated technical analysis, and contractors will update other out-of-date information as necessary.

Additional feedback on these changes and this approach in general is very welcome now, at the next meeting, or at any time.

8) Next Steps

The Council was asked to send comments on the plan sections to Gail or Michelle by March 2. The planning contractor team is happy to provide the plan documents in word, or in track changes, as clean copies, or whichever the Council members prefer. The planning contractor team can also collect comments however the Council members would like to submit them, either with electronic or hard copy mark ups, or via email or phone call.

The next sections the Council will receive to review will be Sections 6, 7, 8, which will go out for review by March 10. A full review draft of the entire document will go out shortly thereafter, which will give the Council a chance to see revised and finalized Executive Summary and other miscellaneous parts of the document, Sections 1-5, and limited revisions to Sections 6, 7, and 8.

Our next Council meeting is scheduled for March 23rd.

9) Public Comment

Chair Davis asked if there were any comments from Council members or members of the public or local officials. There were no public comments forthcoming, and no elected officials wished to comment.

The Chair thanked the meeting organizers, speakers, and participants for joining the meeting.

10) Next Steps/Wrap Up/Adjourn

Meeting adjourned at 2:20pm

Meeting Attendance

Council Members

- Melvin Davis (Chair)
- Pat Graham (Vice-Chair)
- Rabun Neal
- Hunter Bicknell
- Stuart Cofer
- Jim Luke

Georgia EPD Staff

- Anna Truszczynski
- Jennifer Welte

Public Attendees and Agency Partners

- Michelle Bard, Georgia Historic Preservation Division
- Paul McDaniel, Georgia Forestry Commission
- Paula Feldman, FNI
- John Joiner, USGS
- Ritchie Mullen, Georgia Forestry Commission

Planning Contractors

- Gail Cowie, Water Planning and Policy Center
- Michelle Vincent, Jacobs
- Brian Skeens, Jacobs