

# Memorandum

*To: Savannah-Upper Ogeechee Regional Water Planning Council*

*From: Ashley Reid, CDM Smith and Michelle Vincent, Jacobs*

*Date: November 10, 2022*

*Subject: Savannah-Upper Ogeechee Regional Water Planning Council Meeting Summary*

## Welcome, Introductions, and Council Business

Chairman Bruce Azevedo called the meeting to order. Chairman Azevedo called for a motion to approve the prior Savannah-Upper Ogeechee (SUO) Council Meeting Minutes (July 2022). Minor corrections to minutes noted and will be addressed at break. Minutes (as corrected) were approved by motion, second, and unanimous vote.

Chairman Azevedo called for a motion to approve the draft agenda. Agenda was approved by motion, second, and unanimous vote.

Chair Azevedo invited Ashley Reid to give updates related to Regional Planning.

## EPD Updates

### Planning Schedule Updates

Ashley Reid gave a brief re-cap of the schedule as presented at the July meeting. She updated the Council on the plan schedule to date, which includes an additional six months of planning time, to ensure new Council members are incorporated into the process and that sufficient time is available for completing the plans.

Ashley also recognized Brendan Thompson, a newly appointed Council Member who was present.

### Seed Grant Updates

Hadyn Blaize, GAEPD gave the Council a brief update on seed grant status. EPD has offered a no-cost one year extension to the FY2020 seed grants with the City of Savannah. For FY2021 – the City of Savannah water monitoring upgrades are in progress. The 2021 project is the second phase of the 2019 grant project and will be completed on 8/3/2023.

FY2022 water quality project on instream function of Savannah is in progress. For FY2022, the urban pond complex with City of Augusta is underway. Both FY2022 projects are scheduled for completion in FY2024.

Total grant funds in the region right now are more than \$400K.

FY2023 applications closed on October 31, 2022. Eight applications were received from six different council groups. None were submitted by the SUO council.

## Soil Amendments Overview and Regional Updates

### Topic Introduction and Background – Lee Vaughn, Elbert County and Tonya Bonitatibus, Savannah Riverkeeper

An issue of improper waste management from the poultry and port-a-potty industries is introduced as a point of concern. The waste from these industries is dumped twenty-four hours a day, seven days a week without being properly knifed into the ground and left exposed. To store the waste, lagoons should be implemented so that the waste can be properly handled. Companies have started to rent farmland for the purpose of dumping in other counties, which does not solve the issue. Speakers have met with Gary Black, Agricultural Commissioners with little movement.

### Experience and Status Updates – Jay Paul, Oglethorpe County and Sam Moore, Wilkes County

Oglethorpe County Chairman, Jay Paul and Wilkes County Chairman, Sam Moore presented a timeline of the issues related to the waste application/soil amendment over-application.

Fish Kill in Wilkes River: Little River McAvoy fined \$85k and ordered to remove waste contributing to the fish kill in Wilkes River. Fines are small – Like “charging someone a nickel for robbing a bank.” Very lucrative business for farmers to be in due to the original policy not having any regulations. Washington (City) had to shut down a water plant because its creek had too many solids in the water source.

There is an active search for waste dumping sites now, during the winter. The red clay soil does not allow for high infiltration. Many areas have water/streams/lakes on them as well that are or could be impacted by this waste dumping.

A map of known soil amendment sites was displayed. This waste hauling is twenty-four hours a day, seven days a week. This problem is not just in their three counties but widespread in area.

### Pathway Forward – Hon Robert Leverett, State Representative and Kathleen Bowen, ACCG.

Representative Leverett offered his thanks to many of those involved for their assistance and information. The help from ACCG in navigating this issue, with other entities such as Poultry Producers, has been very much appreciated. Collaborating with entities that need soil amendments and want to use them responsibly is important. Counties do not have any authority to make their own rules related to agriculture and soil amendments. The rules/laws are set by the state, and yet it's the counties that are getting the complaints and are unable to address them.

Smell and Flies: There's no information source available to determine who is dumping or spreading what. A website/information portal should be created to track who is dumping, what materials are being dumped and where the dumping is occurring. This will help make sure that only what is approved is being spread under the licensed soil amendment. This would also help to ensure only licensed soil amendment is spread.

A form of field testing should be added into the process so that materials being dumped can be determined before the dumping occurs.

Concurrent Jurisdiction/Enforcement: There should be some form of concurrent jurisdiction and enforcement in partnership between the state and the counties. This would allow the counties to

enforce the state rules on the books. So, if an operator is violating the statewide rules, there could be consequences.

Landowners are being paid so that companies can spread these materials. If landowners are accepting materials, they should be able to justify that they are "growing" something and that the soil amendment can aide with growth.

Increase Range of Permissible Fines: There is a need to increase the range of permissible fines for big businesses. Currently, the fine amounts are not enough to make an impact or modify behavior.

The Council was walked through the ACCG policy position on Soil Amendments by Tonya Bonitatibus. Suggestions or desires for amendments to the Soil Amendment Regulations were discussed.

It was also noted that government entities and other officials should have the tools and resources they need to enforce these regulations.

Draft Rules in October: A new draft of rules have until December 1, 2022, to receive public comment. Hopefully these rules will be finalized by the end of the year and out in time for the legislative session.

The Forum to Discuss: The dumping of unregulated materials can affect the quality of life as well as water in these counties and many others. To help fix issues associated with the dumping, there is a desire to keep things neutral for the agriculture industry in a way that allows for new legislation that the agricultural industry won't oppose, but the counties have a lot of pressure from their citizens to address this issue.

Kathleen took the Council through next steps. These steps include mapping and documenting impacts of the dumping, drafting state legislation, organizing a meeting with the new commissioner of the GA Department of Agriculture and lastly, incorporation into the Regional Water Plan.

*Question: For people with wells, what impacts have been seen?*

*Answer: Department of Agriculture doesn't require mapping, so there is no oversight on where things are dumped, making it difficult to track impacts.*

*Comment: There is no centralized hotline where someone can call and report illegal dumping activities or their impacts. This is something that can be included in the regional plan.*

*Comment: The Department of Agriculture has two to three staff members assigned. Resources are limited.*

*Comment: This industrial waste is being treated as an agricultural product. Companies have purchased the land, and will dump all year long, regardless of whether anything grows or not. For example, 2200 loads in one year – eight loads a day, seven days a week. There was an instance where extensive dumping into a lagoon caused it to overflow.*

*Comment from Chat: [10:48 AM] Luke Owen (Guest):*

*There is an existing program that allows local governments to enforce state law. but it is applicable to land disturbing activities. Since the Department of Agriculture does not have regulatory authority, the Georgia EPD would have to implement a program that allows local enforcement. That applies to land disturbing activities, but not agricultural activities. Would need a rule change to designate.*

One of the primary waste types is from chicken processing water from the poultry industry. This “product” should be considered industrial waste and not a “soil amendment.” An elderly citizen was not fully aware of what he was signing up for and what materials were being dumped on his property. Twenty-two truckloads a day of this type of “soil amendment” destroyed his fields over a thirty-day dumping period.

Because there are good faith users that are using soil amendments for growing purposes, prohibiting the process is not the objective, but something must be done to monitor applications regarding land and soil capacity and nutrient needs. It is important to note that you can’t timber a location without notice, that type of requirement could be implemented here.

Citizens are making calls to their county governments which has deterred county elected officials from serving in office because of they don’t have the power to do anything about it.

*Comment: In other states and nationwide, there is more oversight. For example, SC seems to have better oversight and can track problem areas. There is a concentration in Hall County. It make be difficult to do the same here because “Chicken is king” here in Georgia.*

*Question: Could the Council use a seed grant to study this topic and gather information? 50% of creek is red-lined. Can we do a study and take samples to see how these sites are affecting water quality?*

Question: What can the Council do to support change?

*Answer: The Council can write a letter in support of the new or suggested regulations and legislation. Also, it is helpful to call your legislator and let them know your concerns.*

Chairman Azevedo added that he would like to incorporate this information and action items into the regional plan and that to their regional councils should be encouraged to add this to their plans as well.

### How to Address through the Regional Plan? – Ashley Reid, CDM

Ashley Reid took the Council through next few steps to continue with the development of the Regional Plan. The next meeting is to discuss management practices, and to examine the soil amendment issues that would be appropriate to incorporated into the plan.

*Question: Where do soil amendments fall in the plan?*

*Response: BMPS aren’t separated by agricultural, so the Council will need to decide where these additions will best fit.*

Soil amendments doesn’t have to be in there explicitly but adjusting a practice that can support the main objectives and goals of the regional plan.

Ashley will circulate section 6 of the plan which hold the management practices that we currently have in place, and then the Council will discuss any additions to the practices, and how the practices may be modified to address the concerns of the Council. This will allow for the Council to discuss the best ways to assist and contribute.

## Break for Lunch

### Ground Water Resource Assessment

Ms. Christine Voudy, GAEPD gave an overview of the Groundwater Resource Assessment.

Select aquifers in GA were prioritized for assessment. The three major aquifers were the crystalline rock, cretaceous, and Floridan aquifers.

Sustainable yield is the amount of water that can be withdrawn without causing unwanted results. Drawdown is not to exceed 30 feet. Reduction in storage does not go beyond a new base level and recovers between periods of higher pumping. For recharging, no more than 40% reduction in stream baseflow can occur. Levels do not go below top of confining layer.

The Crystalline Rock Aquifer was analyzed using a water budget approach focusing on two main areas. The water budget focuses on streamflow as the primary estimator of recharge and groundwater availability.

Forecasted demands – 2.770 MGD; 2060 – 4.871 MGD

The Regional Coastal Plan Model is seven model layers to depict how an aquifer is prioritized. MODFLOW three-dimensional finite difference model uses grid spacing in a mile by mile square. For all permitted well locations and pumping rates within the GA Coastal Plain, determining maximum demand from municipal, industrial, estimated agriculture wells is based on the USGS water use data.

Round 1 sustainable yield estimated from low end (uniformly increase simulated withdrawals from existing locations) to high end (non-uniformly increase withdrawals until well criteria is met.)

Low End of SY – 347 mgd

High End of SY – 445 mgd

CSSI Model Simulations are based on the historical water withdrawals in Savannah and Hilton Head Island with different pumping rate scenarios. The image showed a plume that had moved two miles inland annually.

Savannah-Upper Ogeechee Counties are in the green zone for pumping which means they do not need additional restrictions. These restrictions would be required to preserve water conservation and reuse measures.

The yellow zone requires additional 5 mgd through 2008 for its required conversation and reuse. The red zone dictates that there is no net increase in UF withdrawal amounts. This would restrict withdrawals to 2004 levels.

Model updates between 2017-2018 included updated grid spacing, additional conditions, and reported agriculture withdrawals.

According to the USGS Groundwater Level Measurements, groundwater levels are increasing.

*Question: Have multiple gaps been addressed to account for surface water nodes/gauges?*

*Answer: The study converted some of the agriculture users to groundwater users and looked at results to see how that would address gap for surface water.*

*Question: How does this impact recharging groundwater?*

*Answer: This is addressed through engineering barriers. One approach is by injecting air to impact the groundwater where it acts like a curtain to allow Savannah to withdraw, and not impact Hilton Head. This method requires maintenance in perpetuity and is very expensive.*

*Question: How deep are these wells?*

*The Lower Floridan well is 1,000 feet. It is an expensive well and must go through confining layer to draw water. The Upper Florida well is hundreds of feet shallower. The wells depth depends on how deep the aquifer is. Savannah has 48 wells, and they don't use them all at the same time. Some of those wells are also temporary.*

*Question: There are new wells in Bulloch County? Any modeling?*

*Response: To begin a model for those wells, we would need the specific locations. Currently, we don't have a specific formal application with specific locations or specific pumping amounts.*

[see slides for additional details]

## **Public Comments, Wrap Up & Adjourn**

Ashley Reid thanked elected officials and speakers for attending.

Chairman Azevedo asked if there were any members of the public or elected officials present who wished to provide any comments. No comments were forthcoming.

Chairman Azevedo asked the Council members for recommendations for future meetings topics.

Next meeting will be tentatively planned for February 2023. Some subcommittees meetings may be planned to work on specific issues over the course of next 8 months.

Meeting was adjourned at 1:55 pm.

## Meeting Attendance

### Council

- Bruce Azevedo
- Jerry L. Boling
- Patrick D. Goran
- Suzanne Sharkey (online) GA Power
- Sue Parr-August (online) August Chamber of Commerce
- R. Lee Webster
- Tenia S. Workman
- Lee Vaughn, Elbert County Chairman
- Brendan Thompson

### EPD

- Clete Barton
- Haydn Blaize
- Christine (Chris) Voudy

### Planning Contractors

- Ashley Reid (CDM Smith)
- Autumn McNeill (CDM Smith)
- Michelle Vincent (Jacobs)

### Public and Agency Partners

- Tonya Bonitatibus (Savannah Riverkeeper)
- Callie Oldfield, Phinizy Science Center
- Sam Booher, Sierra Club
- Maegan Corley, Colonial Group
- Frank Carl, Savannah Riverkeeper
- Damon Mullis, Ogeechee Riverkeeper
- Carol Flaute, NEGRC
- Oscar Flite, City of Augusta
- Carly Nielsen, Ogeechee Riverkeeper
- Wes Byne, City of Augusta
- Dianne Fields
- D. Smith
- Kathleen Bowen, ACCG
- Amanda Willis, GRWA

### Elected Officials

- Rob Leverett, State Representative
- Jay Paul, Oglethorpe County Chairman
- Sam Moore, Wilkes County Chairman