

# Minutes for GWMP Group Meeting #5

## July 18, 2019

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Welcome by Jennifer Hughes

Introduction by Kristy Ellenberg

Going back to the beginning of the process –a need for a groundwater management plan is how we started, looking at the core principles for the program: protect resource, maintain conditions for development and use, and prevent waste.

Back through pyramid: it starts broad with the statutes, laws, and regulations that establish the program and what it can do, the groundwater management plants, the 5 year groundwater evaluation reports, with permits being the most site specific.

Review of timeline: made it through summer of 2019, we are on track. Have gotten much feedback and input from the stakeholders.

The process beyond here is having the public meeting/open house then the board process for approval.

From now: Lower Savannah COG will meet August 1<sup>st</sup>; August 14<sup>th</sup>: tentative GWMP Open House; August 15<sup>th</sup>: stakeholder workgroup meeting if needed (location TBD); Early September: final edits and state regulations; November: present to the Board.

Balance of stakeholders, with values for this workgroup of: commitment, transparency, mutual respect, active participation, dialogue and listening, solution focused, strive for consensus, and focus on the region. Focusing today on coming to a consensus to finalize the draft plan.

On the collaborative part of the spectrum, the open house will be informative and getting basic feedback from general stakeholders.

We want to focus on the strategy section, but we will go through each section for comments. We are hoping to focus on Phase 3.

The main goals of the planning process, we asked for your feedback on this and they are hopefully mostly covered in the plan. Have a plan focused on sustainability throughout, quantitative when it can be, qualitative when necessary, proactive instead of reactive, broad buy-in, ensure that reasonable use is protected without hierarchy of use.

Lance Foxworth presents the whole plan for workgroup review.

## Executive Summary

We expect views, and want more content that explains why it is different than other areas, and other things to give an overview of what's to come in the report.

The Department wanted it to remain succinct and keep more similar to other plans. Took comments on specificity into consideration, but we wanted to not repeat too many things that are already discussed at length in other sections.

What is the importance of some of the data in the document, not shown or discussed in executive summary? What does some of it mean for the area? It should include something about the region being a catchment area for the aquifers further towards the coastal areas and that the aquifers are interconnected in this region.

The hydrogeologic section goes into detail on that, but maybe the executive summary doesn't need to be that detailed.

Maybe we can include a parenthetical phrase that points to where more detail on the differences in the region can be found?

Yes we can do this.

Can respect the opinion to have less information in the summary, but you want to be able to pull up all 5 executive summaries and be able to tell if there is a difference between the other capacity use areas, so that they are not exactly the same.

Do we want more detail? Many people won't read the document, but if they do, they won't want to read the entire document. If we add more to that, it becomes unwieldy. This is just to say what the purpose of the plan as we are defined to do. We do like the idea of adding something that describes the differences or where you can find those.

Maybe since this area is so different from some of the others, it needs to reiterate that in the summary.

Each area has their own thing that is specific to there, and we just don't necessarily get to there in this section.

## Introduction

Described the things that we changed in the section. (no comments)

## Definitions

Described the few things that we changed. (no comments)

## Geopolitical Structure

(no comments)

## Hydrogeologic Setting

A few changes, we are working on a new recharge map.

How is the interconnectedness related to our permitting in this area?

We talk about this in the strategies, with regards to capping etc. So we reference that the surface water can also be affected, so we need to be aware of the water levels.

You consider interconnectedness an adverse effect?

No, just that we need to know that it's there, and that there can be adverse effects due to them being connected.

## Water Budget

We wanted to make it clear: we cannot make a specific water budget, and cannot make an entire state water budget or one just for this area or a one permit.

But why not? We need this.

We Cannot do that because if we give a permit, we can't base it on a region-wide budget. For example, we could have a bunch of wells together, which wouldn't have a huge impact region wide, but can have impact locally.

A budget is still a critical informative tool for the Department, correct? We should make this clear.

We are not looking at a western budget, mostly the groundwater model and looking at what is available. Can't do it for the entire area, Breezy Hill is easy because it is basically a groundwater island. Need to look at withdrawals individually. Need to look at big picture and small scale for permits. However, generalized water budgets are still useful tools.

Suggestion: we go through and talk about inputs and outputs in a rudimentary budget. Maybe we can say something akin to: "...though the budget is a helpful tool, it's not what we can use for individual permit decisions."

Yes, the water budget is helpful, but we can't use it for small, local permit decisions.

Figure does not acknowledge that we are withdrawing water, this needs to be addressed.

However, with all the water the state gets, we are using barely any water with regards to that.

I have a different graphic that could work that is more of a savings account type of graphic. Also with regards to water, we don't get all of that precipitation into the aquifer; it doesn't always get through the root zone or even go into the soil at all due to transpiration. Also, using a graphic with numbers can be confusing when we say our withdrawal isn't significant when really depending on where it is can be very significant.

Also we are the catchment basin, how much do we need to allow to flow through so that the lower aquifers are recharged?

Some of this is covered in the text.

We are reluctant to include how much water we use. Once again, why are we not including how much use vs. how much is precipitated state-wide?

Let's say 48 inches falls, only about 10% infiltrates into the ground. This also depends on how much water is used in a local area. If we are looking at total percentages for whole state, we have to talk about how much is infiltrated and then talk about what is a groundwater budget.

If I cut down all the trees, the river would be flowing at a much higher rate because those trees are taking up a lot of the water.

The amount of water precipitated isn't static, the infiltrated isn't static, can't put a state number to it. Maybe we can include something like this not in the plan, but make it part of the 5 year evaluations.

Can be misleading, used pool analogy. Need to be able to maintain a specific amount in the aquifers to keep above certain thresholds; we need to be able to spread out the use across an area.

Could we add a sentence talking about recharge and pumping and why even though we get a lot of rain statewide and our use is a small percentage, the importance is how it is locally pumped and it leads to how we need to manage it?

Would this work to include more detail in the evaluation and some information in the recharge model, but it would be in the western 5 year evaluation report.

Report: includes storage. When you have low rain years, we have less storage. High rain years and low pumping you have increased storage. Is this more important to include? Should we report on that and not just withdrawals?

Changes in storage are seen in the hydrographs that we present. We could add this in based on how it is withdrawn that the withdrawals can have impacts. We can add this into the evaluations as model recharge vs. reported withdrawals.

How are you measuring storage? With monitoring wells and models? There are gaps in data.

Yes, monitoring well data is input into the model. And yes, and models will get better the more data you have. It's a useful tool to see what's going on in the aquifer.

## Regional Description (Topography and Geography, Climate, Land Cover)

I (PFD) didn't see that as you're looking at all the charts in the Appendix, this chart doesn't show a decline. There are things happening in this area that are not mentioned here. There is a whole group of charts but then we have this chart in the section. Why is this here and why is it important?

This is a plan not a report. There is a well in Lexington County that just shows climate signals with the climate data overlain because it is not located close to pumping. We can't overlay the same things on all of the hydrographs in the report. The overlain data is broad climate data. We do have some language there in the description. We are trying to show that climate and pumping can affect water levels. Can do the same thing with land use (harder to see, but it is there).

That would be a good thing to add to the text or chart.

Maybe look for the 2016 land use data or at least mention that the data currently in the plan is from 2011.

End of Phase 1.

## Groundwater Trends (demand)

Where is the water usage at SRS in the water use table?

Aiken, Barnwell, considered industrial use with some water supply, they also have large surface water intake.

The population has increased about 20%, but there is also a large increase in use.

Much of the increase in water use is from reporting between 2001 up to 2018, so it is hard to say how much is actual increase and how much is reporting.

The plan talks about how much more efficient irrigators are? Should we take the charts out?

We get the large users, but not the smaller users who have issues, and these figures do not have much explanation to allow for the interpretation however the reader would like. The use per well can be decreased because of the large number of smaller wells. We will look at the water use 5 years from now and potentially see that water use has become stagnant.

Is there a mechanism that will tell us when the 5 year evaluation is being done or has been completed?

Yes, you (the workgroup) will be the first to see as we are putting it together.

The assessments that have come out at this point: what will happen with the plan? Is it looked at and it needs to be updated?

Right now, the Trident is having discussions about updating their plan. The reports are part of the plan, so we are complying with the plan. However, if a group gets together and says edits need to be made to the plan, that can happen even without the report. Only the evaluations are in the plan to be created every 5 years. The plan can only be updated after going through Board.

End of Phase 2 and 15 minute break.

## Groundwater Management Strategies

### Strategy 1

Tried to change some wording to make it clear.

Two different things here: areas of concerns, and active measures to change things. Does this need to be 2 strategies?

Monitoring is mostly taken care of in strategy 3, so it is a 2 step process. Need to identify where we have issues before we can act on it.

Should we order the strategies differently then?

We can move strategy 3 up to 1. We do not weigh any with importance. If strategy 3 is part of allowing for how we act in strategy 1, move them around. (3 becomes 1, 1 become 2, 2 becomes 3)

Is there an extra "for" in the last sentence in the last sentence in the introduction for the strategies?

Yes, we will change that.

Does what is currently strategy 1, is that 2 strategies?

No, mostly because it is a two step process for the same goals. Can be local or regional, etc. So it is best to keep it as one strategy.

Maybe change wording "Identify *Geographic* Areas of Concern/Reduce Pumping Where Appropriate"

We can do this.

Probably want to add: "to seek out wells that should be abandoned if it connects several aquifers."

The problem is that the framework has changed over time as more data comes available. Some wells that were not considered connecting different aquifers, and now they have been found to connect aquifers based on framework updates. We have not gone back and told people that they need to get rid of their wells. However, if there is a well that is causing a problem because it is connecting several aquifers and causing some kind of infiltration into the aquifers, we can do something about it.

Can we ask farmers who have 50 year old wells that were built correctly based on old data to drill a new well?

No. We would only ask if the well is poorly constructed to cause an adverse effect to the aquifer, such as runoff of nutrients from the surface into the well. Even then we would find other ways around just drilling a new well.

## Strategy 2

Have not made any changes. (no comments)

## Strategy 3

Included a new section that explains that DHEC doesn't control the monitoring network, just uses it. We can cooperate with partners to increase coverage by including potential abandoned wells and suggesting areas to drill new wells.

Wordsmith: "Additional actions to achieve this goal include but are not limited to:" for added section

## Strategy 4

Discussion on this goal, reworded a lot of this goal to make sure we were focused on the education side. We want to use our stakeholders to help develop these strategies. The goals and strategies here can't be specific yet, but there will be people involved with developing these goals (including this workgroup).

Wordsmith: get rid of comma (can't remember area)

Part 2: Establish identification of water losses and establishing correcting actions

Part 3: action word

Maybe identifying incentives for changes? No concrete suggestions, but maybe include that somewhere? We don't mention incentives anywhere in the plan...maybe include it somewhere?

Should include them somewhere, maybe the stakeholder groups can come up with lists. We didn't want to box ourselves in within the plan. In other areas where we have this rough strategy, we need to flesh out what we've done. It's fairly new, so we are working out how they all work, including having partnerships with other groups, we have state water plan being developed, EPA has their own water sense program, etc.

Maybe we can add a catch-all to discuss the ability to do that eventually? Edit sentence: "SCDHEC will coordinate to develop and identify (or identify and develop) resources, strategies, and incentives for conservation."

## Strategy 5

Not many changes, just clarified statutory guidelines.

"To ensure adequate adherence" take "that" out.

## Strategy 6

Added more to the general plan for the continued engagement with the stakeholder group.

Is stakeholder group defined? Make it consistent what/who it is referring to (doesn't need to be defined, just where first mentioned).

Why do we get to send people emails on this when we just post public notices?

This was done to keep from having meetings for every single permit, maintain a list for people that would like to be informed that ability.

Helps with transparency, and there are other permit applications submitted that are not irrigators.

Correct, all new permits are online on our website.

The stakeholder workgroup is most likely to be those people in the room, or at least similar. The interested stakeholders would be this group plus any other that wants more information. At an information session they could add their name to a list to be contacted.

River basin councils: based on river basins, so several can be involved in this area. Is there going to be a convergence of these bodies or are they always going to be kept separate?

We are required by the regulation to have this plan, the river basin groups can do what they want but can't supersede this plan, but hopefully they will work together. Part of the problem is that we don't know how the river basin councils will be set up or how soon it will happen.

In the other three capacity use areas (not Trident) is the only way the public is notified the one day in the paper? In Trident, is just the TAC notified? Why are we going through extra effort to notify more people?

We also post on our public notice website for 30 days. Yes, just the TAC is notified in the Trident.

Do we need an extra level of notification, so the second bullet in the strategy?

I don't think it was intended to create a vehicle to intercede. This was a compromise so we wouldn't have a TAC.

Should it read "interested stakeholder work group" instead of a whole separate list? It is not a notice to appeal. It's just to make sure permit was reviewed in adequate manner based on the approved plan. They can give a comment on how it was reviewed but not a way to say yes or no to the permit. In addition, we notify all registered users within a mile, so we must do this.

Can we restrict an appeal to a mile?

Anybody can appeal a permit, can't restrict it by geography. If any permits are appealed, sometimes lawyers use the reason that they are not locals as a reason that their appeal is irrelevant. If we did something against the plan, we can make sure we are doing it correctly.

Most people are not going to go out and oppose a permit because it is a specific person.

That can still happen.

Wanted to be TAC-lite. Did not want to interfere to restrict or delay permitting process.

Does the establishing an email list to some nebulous group of interested parties, does it exacerbate the concern that the agricultural community has had for some time?

This is why we are switching it to just the work group to people that work together and knows each other.

There has to be a mechanism to which if somebody get information on a program they are interested in.

Is it fair to have this email list with people that are interested in this?

TAC is almost too engaged, how much dissidence has there been from TAC to take to court? Has it led to that?

Most meetings, it has ended in the TAC needing to focus on the pumping done by the applicant, and not any other factor. We have had to redirect the discussion.

So I can say I don't like something, but it won't necessarily change DHEC's decision.

Yes. And here, it's up to group to see what you want. We post on website and you post in the paper one day.

The only complaint the Trident has had is it delays the process. We don't want to do this.

This is the point of the email list, but we are going to pull it back in and just email the stakeholder workgroup. The workgroup can always forward it along to whom they believe would be interested.

## Groundwater Management Plan Reports

Anything about budgets: will it evaluate climate conditions, etc.?

Yes please.

"Every five years"

We would like to take out "permit cycle" wording so that we still have the report updated every 5 years and not tie it to the permitting cycle in case the permit cycle is changed to some other amount of time.

Yes (consensus).

Bullet three: what is an area of stress? Is it defined?

"You know it when you see it." It is difficult to define explicitly. If we were in Williamsburg County and saw a 50 ft decline in water levels, that may not be a big deal. If we say that in Breezy Hill, that would be very significant. Maybe change to "find areas of adverse effects" to handle this issue.

Does that mean lower water levels or cone of depression? Is this how we define reduction in water level?

Cone of depression forms due to lowered water levels for an extended period. In those two areas, these are the important measures.

Also look at lowered screened levels?

Adverse effects include several factors we look at, not just lowered water levels.

End of document review.

We started in March, and now we're here. If you have any final comments, let us know today. We still have a few more chances to comment, but we will be able to show to a larger audience for more input.

## Final Comments

- It's always scary to put something together when we have issues, and hopefully it will come together and having continuous data updates will make the plan better in the future.
- I feel like we have done a good job at incorporating into this document the aspects of the WCUA that are different from the more Lowcountry and Trident which was a concern all along. It's a little more to make it reflect and how we are different from the others. We might still need to scrutinize the text and make sure we're happy with it. We have also done a good job with text that reflect the budget and how it works throughout the document. I am still, as Cal said, we can't be too prescriptive too soon. One of the things I commit to doing is going back and reading the whole thing. Are we/I happy with the way in which the plan identifies a range of actions or thresholds without triggers, which has been the hardest thing for me. How do we make it meaningful, but having the 5 year review is helpful. I commit to doing that.
- From day one, I had hoped there would be more specificity to threshold values, and I'm still hoping to get closer to that. Always thought should be more discussion in how the areas interact, and even other areas with this one. We are talking about this one area and each area is unique. Should go through all of the coastal plain and integrate ground and surface water. I appreciate the ability to give input.
  - We can be quantitative at the permit level but not plan. We made an effort to be specific in the Waccamaw evaluation and made recommendations based on what we found there, which is the local level, where there were issues with a specific withdrawal. When talking about large 7 county area and coming up with a trigger is dangerous, applies some places well but not the whole region. Can't do that, need to be site specific and can be discussed during the permit process. The report will be helpful in how we do this during a permit review.
  - There will be river basin councils and how does the state manage both; it's combined water resources, like permit length etc. but this is outside the scope of this plan.
- I have been pleased with the group and how we've worked together. A lot of different opinions and agendas, and have gotten along well. It has been a good group and have enjoyed it. The

problems are more state-wide than just in this area. We have a problem with the 5 year permit, but this issue is not for this group. I also have a problem regarding too many hands in the pot/too many agencies involved, and would like it streamlined. Thank you for cooperating.

- We've made great strides on how we holistically look at everything, like how we decided to have all permits expire at the time and how we determined how the area was defined 7 county area.
- Happy with everything and appreciate the input. An issue I have: the issue of applying for a permit to construct and THEN to withdraw, can be \$25,000 to drill the well and then get a permit to withdraw. Say we want to drill a well and I apply for a permit and my neighbor applies for a permit the next day, how long is it? Can I hold my spot for water?
  - The permit to construct has everything that we review a permit to withdraw anyways. We've already decided if the withdrawal will be approved. We would not issue a permit to construct without knowing you can have a permit to operate. We must wait for the 1903 and make sure everything was done correctly. It helps us. If you drilled without this, you could withdraw without DHEC knowing.
  - Once we get the plan approved, you must apply for a permit. We will send you a permit application and will be asking for some specific data and will look through your historical use to help determine permit limits. We will not have you re-drill wells either.
  - Not a water right, it is based on reasonable use. If we get two permit applications next to each other but it's too much water for the area, we want to be proactive before a problem occurs. Want to get the parties together to discuss. We want everyone to get the water they need. We have historically been successful in getting everyone together to figure out the problem without going to a more formal issue.
- If you dug a test hole for doing production for agriculture, the fear is can we dig a test hole and get a permit based on that? We need a notice of intent before test hole. If I put a hole in the ground and then I don't get a permit to pump, what happens? We put all our money in the hole and then it can get denied.
  - You should have applied before doing that. The appeal is on the permit to operate vs. construct. Maybe we need to be modify our language with how we set up our permitting. We also defend the permits we issue, not the appeal.
- Can you appeal either permit (construction and withdrawal/operate)?
  - Usually it's just the final permit, but we will do research to make sure of the process.
- Where we are is a good starting point, and it's an iterative process. I'd also like to say that I agree how this body worked together. It was a thrill to see something happen in the context of watching the state water plan moving – it was almost breathtaking.
- Appreciate the opportunity to be involved as more of a 3<sup>rd</sup> party – has been constructive. I know that from our highest up water is to be taken seriously so we appreciate it.

I appreciate everyone's dedication to this process and the thoughtfulness. We are looking at the next Thursday (the 22<sup>nd</sup>) as a tentative date for a final meeting with the workgroup for this process. And I can't say thank you enough for the work that the stakeholder group has done and staff (especially Lance for spearheading the effort!).