

**Pee Dee River Basin Council (RBC) Meeting #20 Minutes**  
**January 23rd, 2024**

**RBC Members Present:** Buddy Richardson, Everett Allen, Cynthia Walters, Cara Schildtknecht, Mike Bankert, Jeff Steinmetz, Walt Beard, John Rivers, John Crutchfield, Doug Newton, Megan Hyman, Lindsay Privette, Bob Perry, Michael Hemingway, Cliff Chamblee, & Eric Krueger

**Absent:** Cricket Adams, Frances McClary, Tim Brown, Jeff Parkey, Jason Gamble, & Hughes Page (Andrew Harlan, alternate, present)

**Planning Team Present:** JD Solomon, Matt Lindburg, Scott Harder, Brooke Czwartacki, Andy Wachob, Alexis Modzelesky, Joe Koon, Leigh Anne Monroe, Hannah Hartley, Thomas Walker, and Chikezie Isiguzo.

**Total Attendance: 41**

**1. Call the Meeting to Order (Buddy Richardson, J. D. Solomon - Facilitator)**

a. Review of Meeting Objectives

J. D. Solomon (the Facilitator) called the meeting to order at 9:00 AM and welcomed members to the 20<sup>th</sup> Pee Dee RBC meeting. The main objectives of the meeting included an update of the coastal plain groundwater modeling timeline and RBC decision on the groundwater path moving forward, lessons from the 2001 drought, and updates on the draft River Basin Plan Chapters.

b. Approval of Agenda, December 19<sup>th</sup> Minutes and Summary

The members unanimously approved the January 2024 Pee Dee RBC meeting agenda. John Crutchfield made a motion to adopt the minutes and summary of the December 19, 2023, Pee Dee RBC meeting, seconded by Jeff Steinmetz. Approval was unanimous.

**2. Public/Agency Comment (JD Solomon)**

There were no public/Agency comments.

**3. Status of Groundwater Modeling (Andrea Hughes, USGS)**

Andrea Hughes informed the members of the Pee Dee RBC that the modeling team had obtained the data needed to recalibrate the model. She explained that the team was working with other experts and expected significant progress within 30 days following the January Pee Dee RBC meeting.

Andrea Hughes reminded the members of the Pee Dee RBC that because the parent model was already developed, the USGS already has the framework in place with this model. As soon as experts confirm data completeness and other validation steps, the recalibration efforts are expected to yield positive results. The only constraint is the length of time the process will take. The agency will keep the members of the RBC informed regarding the progress of the model recalibration.

Discussion during Andrea's portion of the meeting:

Q: Learned the Crouch Branch aquifer replenished near the Piedmont and it takes 20,000 years to replenish Georgetown County. Why do we care what NC wells are doing and how does it affect NC?

A: It was billions of gallons of water that was missing from the calibrated model we are using for the inset model. So we feel the model we are basing the Pee Dee model on is not valid. Between 2004-2015 there was a new program for water reporting in NC and that data wasn't reported. Billions of gallons are missing which is significant. We won't produce an inset from a parent we know is incorrect. Water doesn't stop at state lines.

Q: Still don't understand how it impacts us.

A: To sign off on the model they have to include this data. It may not impact our results potentially.

A: Parameters are off and inaccurate. Hydraulic conductivity parameters.

A: We want to know for sure to make sure we get it right.

A: The next few months we are working on the parent model – April – May we'll begin work on the inset model and have it ready by summer.

JD asked some quick questions for the RBC to consider moving forward.

A: Should we wait for the model?

B: What can we salvage to include groundwater if the model does not pan out? The RBC can make some mitigation recommendations for the plan.

4. **RBC Decision on Groundwater Path Forward (RBC, JD Solomon) 9:20 – 10:05**

• **Summary of Groundwater Management Plans (Leigh Anne Monroe, DHEC)**

Leigh Anne Monroe shared a presentation with the members of the Pee Dee RBC that summarized the South Carolina Groundwater Management Plans. She explained that the state's water quantity programs cover Groundwater Use and Reporting. Since the 1970s, the state has issued permits in designated capacity areas of the coastal plain for use of over 3 million gallons in any given month (~1in of water per week for 28 acres or average use for 1,000 people). Also, users outside of Capacity Use Areas must register wells if the well or well system will use over 3 million gallons in any month. All registered and permitted groundwater withdrawers report their annual water use to the DHEC.

The water quantity programs also cover Surface Water Withdrawal, Permitting, and Reporting. Since June 2012, the department has issued permits/registrations statewide if the surface water withdrawal is over 3 million gallons in any month. Also, all registered and permitted surface water withdrawers report their annual water use to the Department.

Leigh Anne explained that Pee Dee is one of the capacity-use areas. It was established on February 12, 2004, and covers Marion, Marlboro, Darlington, Dillon, Florence, and Williamsburg Counties. She also explained that every 5 years, or the length of the permitting cycle, total annual groundwater withdrawals are compiled and compared to available aquifer potentiometric maps. The capacity use evaluation report includes the listing of all permitted withdrawers, permitted withdrawal limits, and average groundwater withdrawal; evaluation of withdrawal by category and by aquifer;

identification of areas of aquifer stress and all withdrawers utilizing the stressed aquifer(s).

She rounded up with a summary of Groundwater Management Plans Across the Pee Dee Basin. The Groundwater Management Goals include ensuring sustainable development of the groundwater resource by managing groundwater withdrawals, monitoring of groundwater quality and quantity, and evaluation conditions. Other initiatives mentioned were the protection of groundwater quality from salt-water intrusion (Waccamaw and Pee Dee CUAs), and promote educational awareness of the resource and its conservation (Santee-Lynches CUA)

Discussion during Leigh Anne's Portion of the meeting:

Q: Permits?

A: Once the plan is developed. No one has a permit until it is a capacity use area. Everyone that was registered now has to get a permit. Santee – Lynches took all registered users and they needed to apply for a permit. We go through all permitted users, aquifers, stressed areas using pot maps. Every 5 years (more info in subsequent slides).

Q: Horry and Georgetown Counties are doing ASR. Is that accounted for?

A: Yes it is part of their plan and is related to net water use.

Q: ASR isn't too deep? What aquifer?

A: I can't answer that right now.

C: We can get Tim with Grand Strand or Ray with Georgetown water to discuss.

A: We look at every aquifer.

JD: A: DHEC doesn't have a model , just aquifer levels. They have to have a model to simulate that.

A: Yes, it is included in the model.

C: Santee – Lynches was a good process. Plenty of data, no model, use levels and static levels to inform the process.

C: There has been a groundwater rebound in Florence due to improved management.

Q: How did the rebound occur?

A: Conjunctive use – using surface water first and groundwater second and using multiple aquifers.

Q: Has it recharged?

A: It has rebounded some – would need to check pot maps.

A: Pot maps and data show rebound.

A: Notable recovery.

Q: Recovery and not just seeking other sources?

A: To get recovery they have to use surface water. Spread the use out and don't dry out one source.

Q: Aquifers charging or not recharging? Recovery in the aquifer Florence was using?

A: Yes it has recovered.

A: Assumption is recharge.

• **Summary of existing groundwater and water use data (Brooke Czwartacki, DNR)**

Brooke Czwartacki summarized that the RBC can use information from existing groundwater and water use data sources to make broad yet informed decisions regarding

groundwater management strategies and planning recommendations for the Pee Dee Basin. For example, observed historical water-level data can be used to identify trends and areas of known groundwater decline. Potentiometric maps can illustrate areas of regional water-level change over time in each aquifer. Historical water-use data can inform where groundwater pumping has occurred and is likely to continue.

Discussion during Brooke's portion of the meeting:

Q: Across the top – Lee County – Florence County – Horry County?

A: Elevation which grades down. Bottom #'s are basal elevators. Water elevation – below surface.

Q: Reinserting is it going into surficial aquifer?

A: Grand Strand has ASR and ASR into the Crouch Branch and McQueen Branch. Adds an underground storage tank of sorts and doesn't spread out and stays close by to the injection well.

• **Discussion/Decisions on Next Steps (RBC)**

The members of the Pee Dee RBC resolved to continue reviewing the Chapter drafts of the Pee Dee River Basin Plan. The members also resolved to wait for the USGS recalibration as that would provide them with the most reliable data that can guide RBC decisions and recommendations.

Discussion:

C: We can think about what the toolbox looks like and then test the toolbox when the model is ready. When the model is complete there may be a feedback loop with surface water. Conjunctive use as an example, are there limits?

5. **Frequency of meetings (RBC, JD Solomon)**

The members of the Pee Dee RBC considered and resolved to maintain the monthly RBC meeting, recognizing the benefit of keeping the momentum and continuing the networking among members.

The planning committee is to revise the activities in the monthly plan of the RBC to accommodate the time required for an updated Groundwater model.

Discussion:

C: Build groundwater mitigation strategies and prioritize them now.

Q: If we use a hybrid approach would that lead to more or less conservative strategies/recommendations and can we true them up with the model?

I'd say we can.

Q: Start a little conservative and then tweak it?

A: May point out future areas of concern with the model.

C: The model may not show any problems or areas of concern.

**Motion: Make a motion to take a common sense approach to this whole thing. Hybrid approach to continue with groundwater management strategies using the empirical-based data and clarify that with the groundwater model results later . If the model doesn't**

**come through we aren't behind.**

1<sup>st</sup> – John Crutchfield and 2<sup>nd</sup> – John Rivers

Unanimously approved.

Discussion:

Q: Where are we with the schedule?

A: 3-6 months behind.

Q: For people with 2 year terms – do the RBC members leave?

A: We'd let people finish the plan and then rotate off or continue.

Q: Safe assumption that models will be useful for other basins?

A: Yes, the Pee Dee inset model and the Lower Savannah – Salkehatchie inset model will be developed. Should be easier with future inset models.

A: What happens here does impact other basins timelines for groundwater.

C: Pt 2 is meeting frequency. 1. Stope for 2 – 3 months or 2. Meet every other month or 3. Every 6 weeks or so.

Keep it monthly on the 4<sup>th</sup> Tuesday with a virtual meeting every other one 10-15 minute report out. Also Matt is writing chapters and will have updates.

Q: What is our end goal? Finish by June?

C: Keep rolling live? Every month? If we can get the model can extend a few more months.

C: Before we leave today. From the council – what you want us to dive into more deeply.

Will we have enough stuff to work on? What do you need from us?

C: Will we have the data?

C: Prefer in-person but not drive 2 hours for 15 minutes of content.

C: Keeping it monthly keeps us on track.

Q: Anything left to present to us?

A: Look at hydrographs and pot maps and other ways to present the info and put a report together for the RBC to digest. There's still some room to present info.

C: Build chapter but waiting for the groundwater data.

C: Florence has done well with conjunctive use. Can we get a case study from Florence?

\*stay with monthly meeting schedule\*

**Motion: Keep the monthly meeting schedule with planning team making decisions on virtual or live meetings.** 1<sup>st</sup> – Jeff Steinmetz and 2<sup>nd</sup> – John Rivers

Unanimous approval

C: Consider a field trip? (RBC Chat)

## 6. **Lessons Learned from 2001 Drought (Michael Yip, GCWSD)**

Michael Yip submitted a presentation deck on lessons learned from 2001 Drought. Ray Gagnon is retiring February 8<sup>th</sup> and Tommy Kennedy taking over as acting CEO. In summary, they acknowledged media notifications on "severe" drought conditions. They did not issue mandatory water use restrictions for their customers but encouraged customers, especially water irrigation customers, to minimize their outside water use. They required irrigation customers to follow steps recommended by the Clemson University Extension Service and activated the use of Groundwater wells for the Waccamaw Neck Water System. They monitored conductivity levels at alternative water sources and worked with the adjacent

utility (GSWSA) on additional capacity for their customers.

They emphasized the need for members of the Pee Dee RBC to maintain communication with themselves and the regulators and ensure that every stakeholder is following a similar drought response plan.

Summary thoughts:

1. More water coming down from NC would be good.
2. Alternate intake became the 2<sup>nd</sup> intake with dredging.
3. Willing to come back – drought from 2006-2007 drought the saltwater wedge relating to conductivity didn't die down for 6 months.
4. Regulatory side to represent versus during drought conditions (consistent messaging).
5. Make sure we are following the same procedures during drought conditions.

## 7. **Chapter Status Discussion (Matt Lindburg)**

### • **Approval of Chapters 1 and 2**

Discussion:

Q: Can I still submit recommendations on Ch 2 – 2.3.4.? Cultural and natural preserves are important. Recognize land protection.

\*map of protected lands

\*county or sub-basin acreages

\*along riparian corridors

C: Would like to see ii considered.

A: Ch 2 we could give preliminary approval to Ch 1 and Ch 2 or approve Ch 1 and approve Ch 2 later.

C: Documented water quantity which can be calculated protected by natural lands. Calculable water quantity benefits.

C: Not a real difficult thing to do.

C: Education, employment, and environment and set a goal for 2030 for protected land.

### **Motion to approve Chapter 1**

1<sup>st</sup> – John Crutchfield and 2<sup>nd</sup> – Buddy Richardson

Unanimous approval

Ch 2?

A: Better just to wait to approve Ch 2.

C: Bob and Eric to submit content for Ch 2.

### • **Other Chapter Updates**

Matt Lindburg distributed the Chapter 8 draft on Drought Response. The members of the Pee Dee RBC were invited to review the draft while noting the policy-level recommendations and RBC-level recommendations.

Discussion:

C: Send out Ch 5 so people can review it now.

A: We can absolutely do that.

C: Ch 8 out to RBC a week ago – January 16 – in review period and it is open until Wednesday February 7<sup>th</sup>. Seeking approval of Ch 8 on recommendations section. In Broad Basin plan it

worked and I'd like to know if it is appropriate for the Pee Dee plan. Coordinate response actions in drought.

Does a similar thing happen in the Pee Dee Basin with utilities?

A: Not aware of time set aside for that – discussed in conferences.

C: Follow up with Tim or Michael on coordinating with outreach mechanisms.

C: County government doesn't care about drought communications in Georgetown County.

Ch 6 and 7 – work on developing these chapters.

• **Decision on Executive Summary**

The members of the Pee Dee RBC decided to have two forms of the ES. A 20-30 pager and a 2 page brief/highlights handout.

Discussion:

C: Interest in development of a set of one page strategies for each sector?

Discussion ongoing for that question.

**Motion: 20-30 page executive summary and 2 pager as well.**

1<sup>st</sup> – Cara Schildtknecht and 2<sup>nd</sup> – Everett Allen

Unanimous approval

8. **Closing Comments and Upcoming (Buddy Richardson and JD Solomon)**

The next meeting will be held on February 27, 2024. Buddy thanked all who added to the discussion during the meeting.

Meeting adjourned: 11:39 AM

Minutes: Chikezie Isiguzo and Tom Walker

Approved:

10:04:51 From Michael Hemingway to Everyone:

JD - good morning. Yes, I agree that we should wait for the groundwater model.

10:16:23 From Michael Hemingway to Everyone:

I believe we should continue with the monthly meeting.

10:17:35 From Eric Krueger to Everyone:

Agree with Michael... I think we could go with shorter meetings; maybe work on review / polishing up of what plan writing we can do without the GW model.

10:19:36 From Douglas's iPad to Everyone:

It may be an opportunity for a field trip for education

I think we do not m

Need to get off of the bicycle

10:20:44 From Megan Hyman to Everyone:

I agree with making some of the meetings virtual if we dont have enough content to fill the agenda.

10:21:12 From Michael Fu Man Yip to Everyone:

I AGREE WITH jd

10:22:35 From Thomas Walker to Everyone:

15 min break

10:23:11 From Michael Hemingway to Everyone:

JD - Sorry, I have to leave now for another meeting. Continue to have a good informative meeting.