

Pee Dee River Basin Council (RBC) Meeting #22 Minutes
April 23rd, 2024

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

RBC Members Absent: Cricket Adams, Mike Bankert, Tim Brown, Jason Gamble, Frances McClary, & Jeff Parkey

Planning Team Present: JD Solomon, Tom Walker, Scott Harder, Brooke Czwartacki, Joe Koon, Hannah Hartley, Leigh Anne Monroe, Alexis Modzelesky, Andy Wachob, Matt Lindburg, John Boyer, & Jeff Allen

Total Present: 34

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 9:04 AM and welcomed members to the 23rd Pee Dee RBC meeting. The highlights of the meeting included receiving an update on the Coastal Plan Groundwater Model, discussing current and projected demand, and discussing potential groundwater mitigation strategies. The meeting also continued the discussion of Policies, Technical and Process Recommendations. JD Solomon facilitated the overview of the prioritization model while Matt Lindburg presented updates on the writing of the River Basin Plan Chapters.

b. Approval of April 23rd Meeting Agenda and the March 26th, 2024, meeting Minutes and Summary

- Agenda ok
- March M/S Approval
 - 1st – Michael Hemingway
 - 2nd – Snipe Allen

2. Public/Agency Comment (JD Solomon)

Evan Patrohay from the SCDNR and North Inlet-Winyah Bay National Estuarine Research Reserve, which is based in Georgetown, introduced himself to the members of the Pee Dee RBC.

He introduced the Waccamaw Regional Report Card, a North Inlet-Winyah Bay National Estuarine Research Reserve initiative. This initiative is essentially a community and ecosystem health tracking initiative, a big part of which will be tracking stormwater best management practices. He looked forward to the North Inlet-Winyah Bay National Estuarine Research Reserve collaborating with the Pee Dee RBC in areas of mutual interest.

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

Andrea Hughes provided an update on the groundwater model, noting a slight delay due to missing data from Georgia. She expects the updated model inputs to the Parent Model to be ready by April 29th. However, Andrea explained that she expects all other parts of the plan to be on track with the final preparation and run of model scenarios for the Pee Dee inset scheduled for July- September 2024.

4. **RBC Discuss Potential Groundwater Mitigation Strategies (Matt Lindburg, Brown and Caldwell)**

Matt Lindburg facilitated this session with the aim of providing a comprehensive menu of potential groundwater management strategies that will guide the drafting of Chapters 6 and 7 of the Pee Dee River Basin Plan.

He reviewed the strategies discussed in previous Pee Dee RBC meetings and drew insights from Leigh Anne's presentation on water management strategies presented last month. He also highlighted the outcomes from last month's breakout session on groundwater issues and strategies identified in the Edisto and Broad plans.

On Demand-side Water Management Strategies, Matt Lindburg discussed Municipal Conservation. Some Municipal conservation strategies include updating existing Drought Management Plans and increasing water conservation awareness through Public Education. Other municipal strategies include conducting residential water audits to identify and rectify inefficiencies, providing incentives for installing low-flow indoor fixtures, and implementing water efficiency standards for new constructions.

Matt Lindburg also discussed developing programs to detect and control water loss, promoting reclaimed water use programs, encouraging car wash recycling programs, and introducing pricing structures such as increasing block rates. As part of municipal conservation, he discussed establishing landscape irrigation programs and codes, enforcing time-of-day watering limits, and encouraging xeriscaping to reduce water usage.

Matt discussed Agricultural/Irrigation Conservation strategies such as conducting water audits and retrofitting center pivot sprinklers, using cover cropping, conservation tillage, mulching, and other conservation practices, implementing smart irrigation practices by using soil moisture sensors, and selecting crops suitable for water conservation. Matt noted that crop selection is market-driven.

Other agricultural/irrigation conservation strategies include optimizing irrigation scheduling, implementing drip/tickle irrigation, and utilizing grass buffers to prevent runoff. Matt discussed Golf Course Conservation strategies, including using wetting agents to reduce water use, implementing regular maintenance and water loss control, optimizing time-of-day watering practices, monitoring soil moisture to optimize water use, and adopting low-water use landscaping.

Another demand-side strategy is Industrial Conservation. Matt highlighted promoting water reuse and recycling, implementing water-efficient processes, adopting maintenance practices that control water loss, and installing low-flow fixtures, toilets, and appliances. He

highlighted that, generally, industrial strategy is anchored by developing and implementing drought management plans.

The last demand-side group of strategies was the Thermoelectric Conservation strategies. They included using reclaimed water for cooling and other processes, switching to combined-cycle natural gas plants, using energy-saving appliances to reduce thermoelectric generation needs, and encouraging the use of solar power.

Supply-side Water Management Strategies discussed were New Supply Development, water reclamation, and conjunctive use. New supply development includes drilling new or supplemental wells into lesser-used aquifer formations and exploring desalination as a water source. Water reclamation strategies include implementing non-potable and direct potable water reuse systems, and Aquifer Storage and Recovery. Conjunctive Use strategies include using surface water to supplement groundwater and capturing and using stormwater for potable and non-potable purposes.

Discussion:

Matt Lindburg – municipal strategies – GW management

Q: Example of reclaimed water programs?

A: Municipalities use reclaimed water – purple pipe. Direct potable reuse (distributed through the system)

C: Close to utility and user

C: Sumter uses it within the utility – very limited

C: HHI – irrigating golf courses

C: Dillon – seedlings and hay production

C: Biggest bang for our buck

“No go” – reclaimed water programs

C: Some have irrigation taps and don’t have to pay sewer costs associated with that

C: Extra tap cost

C: ¾” or 1” costs will vary. No sewer charge on the irrigation tap. Using residential you’ll pay sewer for irrigation

C: Facility will last longer.

C: Thousands of dollars to install pipes for irrigation plus cost per month

C: They have to get revenue out of your irrigation tap

C: Based on meter it could cost \$300

C: Tap vs shallow well – shallow well if off the grid

C: A lot of shallow wells with iron stains

C: Darlington – wastewater system has an impact. Encourage more people to connect

C: Some won’t make sense in rural areas

Ag/Irr

Q: How many farmers use water companies to irrigate?

A: No, they’re getting it out of the river or ground

Q: Scheduling – week

at night would have to double the well size to only water at night

C: Irrigation when it helps the crop only

C: Use it when they need to and do not use more than they have to use (industry as well)

Golf

C: When we get to putting strategies into the plan. Could we include the impact from the sectors?

Example: Big impact here vs small impact here?

Industry

C: Industry has drought management plans with DHEC permits – would be great to update them

C: Also for solar power you need a battery backup if cloudy. Combined cycle – need gas

Some things power utilities don't have control over

Q: Energy saving appliances – does it show what savings can be made?

A: Yes, some have rebates

C: Retired Exxon – small plant nuclear – modular nuclear. People are against it with the failure.

Modular nuclear – environmental people are against it

C: Solar is getting more affordable

Q: Can you sell excess power?

A: Yes, wholesale price to sell but if you need more power you have to buy it at retail price

5. Continued Discussion of Policies, Technical, Process Recommendations (Buddy Richardson)

Buddy Richardson presented to the members of the Pee Dee RBC a review of the March 2024 Pee Dee RBC meeting discussion. Buddy Richardson moderated a review session covering each potential policy, technical, and process recommendation.

They included:

Potential Policy Recommendations for Pee Dee Plan

- Surface water withdrawal registrations should be limited to the actual need.
- Develop a cost-share program to drill deeper wells into the aquifer units that have less development pressure.
- Fund a joint compact between SC and NC for the Yadkin Pee Dee Basin.
- RBCs (where applicable) should consider coastal community (tidal) issues
- Water utilities should review and update their drought management plan and response ordinance every 5 years or more frequently if conditions change.
- Drought-impact observations should be submitted through the Condition Monitoring Observer Reports (CMOR) when droughts occur.
- Encourage private water providers to develop and regularly update Drought Management Plans
- Provide guidance on how RBCs should interface with other organizations
- The State should fund an implementation organization in the future (e.g., the RBC or other watershed-based or issue-focused.
- Water supply information should be used to evaluate the viability of new industries.
- Larger private water utilities should create drought management plans and coordinate with public utilities that currently have a drought plan.

Discussion:

Q: Isn't there a compact for Yadkin-Pee Dee?

A: Not an independent association yet at this point. The CWWMG is much more developed

Q: CMOR question – who does it?

A: Online tool at Nebraska recorded and put into database. Someone from the utility should be coordinating with Elliot and SCO at DNR

Contact info should be part of report for that item

Ongoing funding plan implementation

Q: Where would funds come from?

A: State for this activity

C: New funding sources could be developed (from gas or oil – example). Funds could be available for grants or infrastructure

C: Partnerships with COGs or local government (non-state \$)

C: Submitted one other policy recommendation “take care of our house (Pee Dee river basin):

Support the protection in perpetuity of habitat, particularly in the riparian corridors of the Pee Dee River Basin. Priority sites contributing significantly to water quantity, quality, and or potential for enhancement of water quality should be identified and, where possible, protected by voluntary or purchased Conservation Easements or fee-title acquisition.

C: NRCS has programs – part from an easement – stipend

C: Not placed in perpetuity – NRCS. Need it in perpetuity

Q: Can they resell the property?

A: Yes, it can be resold. Short run may devalue property but not in the long run. Long Island example and conservation easements in the 1940s (very valuable property today)

Technical Recommendations for the Pee Dee Plan

- The drivers of unsustainable groundwater withdrawals (i.e. cones of depression), such as water demands, local aquifer conditions, and groundwater well spacing and pumping rates, should be better understood to inform groundwater management strategies.
- An evaluation should be conducted to understand the benefit of using tax revenues from coastal communities to help protect sandhills recharge areas.
- The quantity of effluent from basin dischargers should be evaluated to assess reuse potential
- Study and develop a strategy for additional land protection.
- Study the water quantity and quality impacts of land use changes.
- Incorporate future climate change projections or hydrologic conditions we have not seen before in scenarios.
- More Doppler radar capabilities should be created to help with storm prediction and data collection.
- Future Pee Dee RBC planning efforts should consider water quality.
- Surface water modeling should extend to coastal areas.
- Additional surface water gaging stations should be installed in headwater areas to understand flow conditions better and for future model calibration.
- Additional groundwater monitoring should be installed in areas that may see development pressure in the future.

Discussion:

C: For regulatory changes for effluent. Does all of the RBCs saying the same thing give it more teeth?

C: Policy – are there some common themes from all RBCs?

Process Recommendations for the Pee Dee Plan

- Develop guidance for:
 - o Member replacement if they resign.
 - o Adjusting member terms.
- Develop best practices for recruiting new members.
- The state should organize an annual statewide meeting of RBCs and State agencies.

6. Overview of Prioritization Methods (JD Solomon)

JD Solomon facilitated an overview of Prioritization Methods for Water Management Strategies. He noted that Chapter 7 of the RBC plan focuses on Water Management Strategies, Effectiveness, and Feasibility, and the expected cost to implement. Therefore, there is a need to establish and prioritize water management strategies. JD Solomon also explained that all strategies are equally feasible or relevant for the Pee Dee Basin. Consequently, the members of the Pee Dee RBC need to prioritize strategies based on their potential impact and feasibility, with some strategies being less relevant in the short term.

7. Current and Projected Demand (Alex Pellett, DNR)

Alex Pellet presented the update of the statewide water demand model to the members of the Pee Dee RBC. He explained that the study's results showed that Agriculture demand was High Growth while Manufacturing was High Growth and High Demand. Thermoelectric is an outlier and is being updated. Also, Water supply data is being updated.

He also presented the results of his study of irrigated agricultural land in Pee Dee Basin and showed its value to the Pee Dee River basin planning process.

Alex described the methodology used in the study and invited the members of the Pee Dee RBC for their comments and feedback on the study.

Discussion:

Q: Make assumption on aquifers they are pulling from?

A: We do have aquifer info for reported wells. Without info I would look at the closest well and aquifer they are pulling from

Q: This map – green and purple in groundwater model in 2070 as Ag/Irr?

A: Yes, green is irrigated but not necessarily the well associated with it

C: Not going into capacity use recommendations but we could potentially

C: GW model is a regional model, big trends/big picture

Q: What number are we looking at on the map?

A: #5

C: Is it typical? Density of wells and irrigation? Draw some assumptions? Projections and impact on the aquifer

C: Inner Coastal plain is the primary room for ag growth

C: Irrigation like that is used sporadically and can recharge between uses

C: Correct only using it a few weeks a year

C: We've shown hydrographs with seasonal trends. In other aquifers we see linear downward trend. Crouch branch recharges first

Alex proposal

Q: Does this add 2 months to our project (RB plan)?

A: We haven't gotten a lot of feedback

C: Could be refined in the future with feedback

C: Issue we're trying to get buy in on the chapters so we don't have people voting against the plan

C: Everything I saw – no growth in irrigation in agriculture. In Georgetown all farm land has been developed into housing

C: We aren't taking wells out

C: For spatial I can send map. Summarize the basin for stakeholders to look at

8. Chapter Status Discussion (Matt Lindburg, Brown and Caldwell)

Matt Lindburg presented an update on the draft of the Pee Dee RBC plan. He noted that he received feedback and updated the revised Chapter 2. He also confirmed that Chapter 3 had been revised and updated with comments received. The responses from the revised Chapter Eight draft, which was recirculated for review following the addition of a subsection to address how different water use sectors react to draught conditions, had been received, and the chapter updated.

The draft of Chapter Five, which was emailed to members for review and comments had been received, will be completed when the groundwater analysis is available. Work is ongoing in Chapters 4, 6, and 9.

Matt proceeded to request preliminary approval from the RBC members for Chapters 2, 3, and 8. Cliff Chamblee made a motion to approve Chapters 2, 3, and 8, seconded by Michael Hemingway and unanimously approved by the members of the Pee Dee RBC.

Discussion:

Preliminary Approval

Chapter 1: preliminarily approved

Chapter 2, Chapter 3, and Chapter 8: Motion to preliminarily approve those three chapters.

1st – Cliff Chamblee

2nd – Michael Hemingway

Q: Different scenarios that came back to RBC for approval. How are we to answer questions and operate?

A: Just last week

C: RBC continues to make decisions
C: That's in implementation plan
RBC Membership
C: If the RBC lives beyond the planning phase
C: How do people ask questions – do we have an e-mail or an address?
C: I would hope so, but the RBC needs to pick it up
Ch 5 – did get some comments for surface water
Ch 6 – menu of water management strategies
Ch 9 – get started on policy recommendations
Ch 4 – with Alex get started
C: *Last 2-3 pages should be abbreviations alphabetically
C: Also units of measure
C: Glossary of Terms

9. Closing Comments and Upcoming (Buddy Richardson and JD Solomon)

Buddy Richardson appreciated the members of the Pee Dee RBC and encouraged them to continue supporting the development of the River Basin Plan. JD Solomon noted that the plan is to move toward having a final draft of more chapters by June, with a pivotal meeting planned for May to start prioritizing strategies. He also noted that the group would take off in July to work on the report and reconvene in August and September to decide if it is substantially complete and determine further scenarios to run with the model. The aim is to have the plan approved by the end of the year.

The next meeting will be held on May 29, 2024
The meeting concluded at 12:03 PM.

Minutes: Chikezie Isiguzo and Tom Walker
Approved: 5/29/24

RBC Chat:

08:59:02 From Thomas Walker to Everyone:

we might get started a few minutes late. waiting for more folks to arrive

09:08:31 From Jeff Steinmetz to Everyone:

No problem!

09:28:50 From Jeff Steinmetz to Everyone:

One other idea to include in here is out reach to garden centers/nurseries - it can be very hard to find native vegetation, drought tolerance landscaping plants.

09:29:58 From Thomas Walker to Everyone:

thanks jeff!

09:30:11 From Jeff Steinmetz to Everyone:

Reacted to "thanks jeff!" with 👍

09:54:52 From Thomas Walker to Everyone:

10 min break

10:02:32 From Thomas Walker to Everyone:

2 minutes and we'll get started

10:26:09 From Jeff Steinmetz to Everyone:

So sorry everyone - I have to run to an important end of the year department meeting I have to run to. I'll be there in person next month.

10:27:04 From BobPerry to Everyone:

I have to step away for another meeting. I will return. Thx, bob

10:34:48 From John Crutchfield Jr. to Everyone:

Need to drop-off for another appointment. See you at the May meeting. Thanks, John

10:55:12 From Thomas Walker to Everyone:

10 min break

11:59:34 From Eric Krueger to Everyone:

I have a prior commitment, but can send an alternate

12:02:54 From Thomas Walker to Everyone:

meeting adjourned