## Lower Savannah-Salkehatchie River Basin Council

## September 5, 2024 Meeting Minutes

**RBC Members Present:** Lynn McEwen, Bill Wabbersen, Courtney Kimmel, Dean Moss, Brian Chemsak, Pete Nardi, Ken Caldwell, John Carman, Kari Foy, Jeff Hynds, Brandon Stutts, Leslie Dickerson, Tommy Paradise, Lawrence Hayden, Reid Pollard, Brad Young, & Heyward Horton

**RBC Members Absent:** Danny Black (Kathy Rhoad, alternate, present), Austin Connelly (Angel Brabham, alternate, present), Taylor Brewer, Sam Grubbs, Sara O'Connor, Joseph Oswald, Brad O'Neal, & Will Williams

**Planning Team Present:** John Boyer, Joe Koon, Scott Harder, Brooke Czwartacki, Andy Wachob, Hannah Hartley, Alex Pellett, Kirk Westphal, & Jeff Allen

## **Total Present: 37**

- Call the Meeting to Order (Kari Foy, RBC Chair) 10:10
  - a. Review of Meeting Objectives
  - b. Approval of Agenda
    - i. Agenda approved
    - ii. Dean Moss 1<sup>st</sup>
    - iii. Lynn McEwen 2<sup>nd</sup>
  - c. Approval of August 1<sup>st</sup> Minutes and Summary
    - i. Some typos
    - ii. Minutes approved
    - iii. Bill Wabbersen 1st
    - iv. Pete Nardi 2<sup>nd</sup>
  - d. Newsworthy Items [Discussion Item]
    - i. Rain barrel seminar
      - 1. How to, provide materials and instructions
    - ii. Drought committee had a teleconference and moved US to moderate drought, Aiken to incipient drought, maintained Laurens and Greenwood as incipient drought. Rest of the state is in no drought
- 2. Public Comment (John Boyer)

10:15

- a. Public and Agency Comment Period
  - i. No public comment
  - ii. Agency comment

10:10-

10:00-

- Joe Koon- division director of water resources in DES. Hydrology group managed by Scott Harder has become part of that division. Also have water quantity group, private well program and underground injection control program. Staying with hydrology name
- 3. August Meeting Review (John Boyer)

10:15-10:25

- a. 2009 SCDNR Instream Flow Policy
  - i. Set minimum instream flows for new permittees
  - ii. Don't really apply because most permittees are grandfathered
- b. Comparisons to minimum instream flows
  - i. Lower Savannah
    - 1. Hard to do because regulated releases from Thurmond
    - 2. Not a big difference in times you drop below minimum stream between UIF, current, 2070 moderate or 2070 high
  - ii. Salkehatchie
    - 1. More areas where we could do comparison on instream flows
    - 2. Coosawhatchie log scale, a lot of variability
    - 3. Other locations not a lot of difference between current moderate and high demand scenarios
- c. Water use in agriculture- Coosaw Farms
  - i. Crops- watermelons, blueberries, blackberries, field corn, cotton, sorghum
  - ii. Triple bottom line- people, profit, planet
  - iii. Methods of irrigation- center pivot, micro emitters, solid set sprinklers
  - iv. Filter stations for water resus
  - v. Moisture sensors for monitoring water use
  - vi. Strategy for conservation
- 4. Development of Drought Response Strategies and Recommendations 10:25– 12:00
  - a. Specific drought response related obligations of the RBC with support from SCDNR are
    - i. Collecting and evaluating local hydrologic info for drought assessment
    - ii. Providing local drought info and recommendations to the DRC regarding drought declarations
    - iii. Communicating drought conditions and drought declarations to the rest of the RBC, stakeholders, and public
    - iv. Advocating for a coordinated, basin wide response by entities with drought management responsibilities
    - v. Coordinating with other drought management groups in the basin as needed
  - b. Planning framework outline for Chapter 8 Drought Response
    - i. Summarize existing drought plans and drought advisory groups

- ii. Summarize any drought response initiative developed by RBC
- iii. List recommendations on drought management or drought management strategies
- iv. Include a communication plan to inform stakeholders and the public on current drought conditions and activities regarding drought response
- v. C: as a joint municipal system we have separate drought management systems for each town. Needs updating, working on it
- vi. C: have a draft one going, trying to get commission to adopt this fall
- vii. C: Aiken hasn't updated since 2005, no push to change
- viii. C: (Hope) State Climatology Office and Drought response program. Brought a few extra copies. Working with SC Rural Water Association to hold workshops around the state because don't legislatively have any way to force systems to update their plans. Great resource to help jumpstart process for water systems that do want to update plans. Can help with things that we've seen water systems struggle with
- c. SC Drought Response Committee
  - i. Q: so, there's a committee that's doing that now, can we get more detail on them? Why are we doing the same thing? A: Framework is that RBCs support DMAs and DRCs.
    - 1. C: (Hope) US got no rain from Debbie and less than an inch after Debbie. A lot of counties in drought.
    - One of the first drought response programs in the country, established in 1985, updated legislation in 2000. DNR is coordinating agency, statewide and local members. Trying to recruit members to DMA. A lot of members that serve on RBC and DMA.
    - 3. Drought Response Committee's purpose is to evaluate the drought conditions based on a set of designated indicators and then make a recommendation based on the overall drought condition in the DMA
    - Indicators: % of normal rainfall, crop moisture index, Palmer Drought Severity Index, water resources, Keetch-Byram Drought Index, US Drought Monitor for SC
    - 4 levels of drought: incipient, moderate, severe, extreme. Responses for each level of drought
    - C: shouldn't duplicate. A: RBCs were not intended to be the decision-making body. DMAs decide what counties are in drought RBCs just provide info. Potentially some overlap
    - 7. C: Scott's proposal in US: using RBCs as DMAs
    - 8. C: RBCs know their basins, DRC members may not
    - 9. C: consistent recommendation to get water systems to update drought response plans

- Q: how does weather/ time of year impact decisions? A: have had drought response committee meetings in every month of the year, sometimes don't have as much concern over agriculture
- d. Drought Response- Communication Plan
  - i. How does the RBC want to communicate to the rest of the RBC, the public, and stakeholders?
    - General approach adopted by Edisto, Saluda, Broad, and Pee Dee RBCs: RBC chair, vice chair, or designated liaison solicits input from RBC members on drought conditions and responses for their location and interests -> RBC chair, vice chair, or designated liaison compiles drought info from RBC members-> RBC chair reports to Central DMA reps and DRC -> they communicate with stakeholders
      - a. C: this is so generic. Don't see how practically we can have an impact. A: Example: Kari is the chair, notices drought conditions, emails RBC to see if anyone else has impact to report.
      - b. C: seems like a random sample, not an indicator. Very small subset. A: Hope's group looks at all the indicators. This group looks at anecdotal info
      - c. Q: what's the motivation? RBC chair solicits info based on perceptions of water users. A: Leveraging of power of RBCs to support DMAs. Example of a response strategy where you set a specific metric and that triggers an action, like Edisto RBC developed a low flow management strategy
      - d. Q: does the response strategy get memorialized in a MOU among all the water users? A: still voluntary. Could discuss making a MOU
      - e. C: don't want it to just be up to 1 person to reach out. Maybe DMA has someone from RBC on the calls and they solicit info from other people to take to the meeting. DMA doesn't always have a sense of what's going on until the actual meeting. Should send info before the meeting. DMAs called as needed, but getting some tabletop meetings scheduled
      - f. Q: what's the criteria that determines a need for a DRC meeting? A: State Climatology Office will initiate and give at least 2 weeks' notice to Drought Response Committee
      - g. C: like that there is a liaison
      - h. Q: what would trigger starting this process? A: someone making an observation. Condition Monitoring Observer

Report is a tool where everyone can submit info. Would be good to have the representative and the reporting tool because its useful for state and federal drought reports

- i. C: simplicity is better way to get an ordered results instead of more liaisons and committees
- 2. US: recommended an approach which would eliminate DMAs and replace them with RBCs or subset of RBCs. Requires a change to SC Drought Response Act and supporting regulations
  - a. Q: How long are RBCs supposed to last? A: TBD, but thought was that RBCs would do these plans after 2 years and continue to meet and update plans as needed. Similar to GA. Conceived that membership would change over time but organization would be permanent
  - b. C: if we can't guarantee that RBCs will be permanent, then changing the structure doesn't work. A: we have a standing request into Sen Tom Young to address this
  - c. C: don't need to make this decision today. A: Need to acknowledge future need to solidify RBC's presence
  - d. C: DMA members report to DRC. DRC members can't act alone
  - e. Q: how come DMAs don't line up with DRCs? A: RBCs didn't exist when the legislation was made. DMAs are county lines, RBCs are based on the basins
- 3. Keep discussion limited, don't want to over kill this. All good ideas. Will revisit in a couple months when we learn more about the future of RBCs.
- ii. Does the RBC want to develop any drought management or response strategies or make recommendations to adjust any existing strategies?
  - 1. Example 1: Edisto RBC's low flow management strategy
    - a. Q: is this codified in some way? Should be a MOU. A: its voluntary
  - 2. Example 2: CWWMG low inflow protocol
    - a. Different stages that get triggered by water levels and flows and goals for demand reduction
  - 3. Example 3: Keowee-Toxaway low inflow protocol
    - a. Savannah Basin USACE 2012/14 drought contingency plan
    - b. No reason to want a specific response strategy in LSS because there's already a system
    - c. C: implies needed creation of agreements. Have to work out a deal that whoever needs it the most gets it. Putting agreements in the plan might help funding. More of a water management strategy

- 4. Q: are there key indicators that DRCs look at that they can share with us? our RBC spans over 2 DMAS. Within that territory, what are the key indicators? A: scdrought.com indicators are listed. Can add RBCs to the list. Indicators that are considered during the DRC meeting are set the day before by the committee. Same indicators looked at for all RBCs
- 5. Q: how are we as a river basin going to manage our area in response to their data? A: scdrought.com info
- 6. Q: is there a model? A: no
- 7. Intent is not for RBCs to digest all this info and be that into the weeds. Edisto was trying to solve a particular problem that wasn't being solved. Is there a reason to have a coordinated basin wide response? I don't think there is. Army Corps already has one
- e. BREAK
- f. Developing drought response recommendations
  - Recommends water utilities review and update their drought management plan and response ordinance every 5 years or more frequently if conditions change
    - 1. Adopted by US, Saluda, Broad and Pee Dee, not considered by Edisto
    - 2. Things change over time
    - 3. C: not sure every 5 years is feasible, maybe 8-10? A: maybe look at it every 5 years
    - 4. C: significant increase in water demand is operative for a lot of communities that are growing. Could be a driver to review your plan
    - 5. Q: what does change in source mean? A: groundwater- new pumps, new well locations. Changes volume of water
    - 6. Q: DRC meets and says we're in a red zone, but ordinances aren't updated. No way to enforce? A: executive authority could enforce ordinances. Want water systems to have their own system. Last resort, would have to depend on the state's emergency powers
    - C: just amending it, doesn't have to be that big of a change. Harder in SC.
    - 8. C: maybe we could make a recommendation about potential future legislation that helps communities do these plans. Put things into legislation but don't have funds to do it.
    - 9. C: maybe provide state funding to help update
    - 10. C: Recommend funding to help provide technical capacity to water utilities that might not have it themselves to develop

- 11. Q: what's a response ordinance? A: drought management plan is created. For it to be implemented, have to apply an ordinance to the code of ordinances so the plan is put in place and followed.
- 12. C: one was done in 1986. Updated in 2003 but never brought to the council. Some examples where there is a drought management plan, but it's never been codified by an ordinance. RBC recommendation to get these updated.
- 13. Add recommendation about Pete's suggestion to add a funding mechanism to help utilities update their plans
- 14. Review and adjust plan as needed every 5 years
- 15. Q: why didn't Edisto adopt it? A: never even considered. Edisto spent 3-4 meetings talking about the low flow management strategy and never got around to talking about anything else
- 16. Q: should there be a limit, so utilities don't go 30 years without updating? A: if nothing changes, nothing needs to change
- Recommendations don't have teeth, but they inform the State Water Plan. When the state water plan gets written in 2-3 years, it will include recommendations from the RBCs
- 18. C: if were going to recommend just looking at it every 5 years, don't need a lot of funding. Maybe do review every 5 years, change every 10 years. Definitely going to be contact changes.
- 19. Q: is there a requirement that they submit it for review? A: there is
- 20. C: Can't make you have certain ways to enforce it
- 21. C: should be similar to what we do with the comprehensive plan reviewed and updated every 5 years with a requirement to update every 10 years.
- 22. The RBC recommends that water utilities review their drought management plan and response ordinance every 5 years and review and update every 10 years or more frequently if conditions change. Encourage the state to provide funding to help people create plans
- ii. The RBC recommends that water utilities, while updating their drought management plan and response ordinance, look for opportunities to develop response actions that are consistent with those of neighboring utilities
  - 1. Adopted by US, Broad and Pee Dee, not considered by Edisto, not adopted by Saluda
  - Broad said there were different messages getting sent out and there might be confusion among different customers that are adjacent that are getting water from 3-4 different utilities. Makes sense to have consistent responses

- 3. Saluda said that people know where they get their water and will get the messaging from their utility and not care about the others.
- 4. Q: how would it work in the state water plan? A: not sure
- 5. Q: what does consistency mean? Could be different issues in Hilton Head than somewhere else. The way you react to triggers is different A: consistency- if you go from severe to extreme, same group of customers in each utility would be required to water on odd/even days. Didn't want one utility saying something and the other utility saying something else
- 6. C: no practical way to implement that. It's just a statement
- 7. C: maybe have some encouragement to review/ implement
- Q: would the water source and capacity of the different utility providers cause different impacts on the capacity and drought impact? A: yes, some utilities have large sources, some have small sources.
- Like Saluda, y'all don't think this is a useful recommendation. Can add language that suggests that utilities start with the guidance document to ensure a base of consistency then they can differentiate as needed

	Lunch		12:00–12:25
5.	Groundwater Resources – Part 2 (Brooke Czwartacki, SCDES)		12:25–
	1:15		Poo Doo basin bas

- a. Change to the planning process. Groundwater modeling in the Pee Dee basin has been taking longer than expected. USGS didn't have all of the pumping for NC so had to recalibrate. More important to finish Pee Dee plan than to have groundwater modeling. Using a different approach, looking at existing info.
  Better to move on without groundwater modeling for this basin and Santee. Saluda and US have been moving faster, likely to finish ahead of 2 years
  - Q: will there be an opportunity to get back to it or will it be further along in the process? A: yes, want to incorporate it into later integration but likely won't be done by the time most of the plans are done
- b. Presentation relies on potentiometric maps
- c. Physiographic provinces
  - i. Blue Ridge and Piedmont
  - ii. Coastal Plain
    - 1. LSS is completely in coastal plain
    - 2. 95% of the water is locked up in these coastal plain aquifers
- d. SC hydrogeologic framework along dip
  - i. Fall line to coastline
- e. Coastal Plain Aquifer Extents and Recharge Areas
  - i. Upper Floridan, Middle Floridan, Gordon, Crouch Branch, McQueen Branch, Charleston, and Gramling

- f. Capacity use areas in LSS basins
  - i. Capacity use area- a groundwater withdrawer of greater than 3 million gallons during an y 1 month from a single/ multiple wells under common ownership within a 1-mile radius from any one existing or proposed well
    - 1. Any user who uses 3 million gallons or more in any month of the year is required to apply for a permit
  - ii. Lowcountry areas- Beaufort, Colleton, Jasper counties. Wester Area-Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington, Orangeburg counties
  - iii. Groundwater management plans examine water use in the CUAs to ensure sustainable ang beneficial use of the groundwater resource
- g. Reported SC water withdrawals (2023 groundwater)
  - i. 900 permitted and registered users
  - ii. All on the map are self-reporting to the agency
  - iii. C: Should be a correction to the slides
  - iv. Excluding energy, there's more ground water use
- h. Reported groundwater withdrawals (2013-2023)
  - i. not much change from 2022, not much of a trend
- i. Groundwater monitoring network
  - i. 75 well sites actively monitored completed in 9 aquifers
  - ii. Period of record ranges from 4-69 years
- j. Water level measurement of an aquifer
  - i. Artesian- pressurized underneath a confining layer
  - ii. Precipitation recharges the aquifer
- k. Potentiometric water-level of an aquifer
  - i. Potentiometric surface- level, in feet, of elevation to which water rises as measured in tightly cased wells open to specific aquifers
  - ii. Changes in groundwater storage and direction of flow gradients are represented by potentiometric water level contours
  - iii. 2016 potentiometric surface of the Crouch Branch Aquifer
  - iv. Water always flows perpendicular to contour lines
  - v. Q: tell us about the approximated areas. The majority of our river basin is dashed lines
- I. Cones of depressions
  - i. No cones of depression in LSS, do have an area of lower pressure that is present as you get towards the coast
  - ii. Q: why is there one in Florence? A: due to pumping of the Florence water system
- m. Upper and Middle Floridan Aquifer
  - i. 1880s vs 2021 map
  - ii. Upper and Middle mapped together because their water levels are very similar
  - iii. Same wells are not used over time
  - iv. Groundwater development has changed over time
  - v. Example: Upper Floridan Aquifer in Beaufort County: water levels over time

- 1. Groundwater development in Hilton Head started in 1950 and continued until it reached 14 mgd in 1999
- vi. Example: Upper and Middle Floridan Aquifer- Waddell Mariculture Center
  - 1. Not a lot of change
  - 2. Several water utilities that utilize the Middle Floridan aquifer. Less than a foot difference between the 2 aquifers
- vii. Example: Upper and Middle Floridan Aquifer Hampton County
  - 1. Very strong season signal. Could be agricultural
- viii. Gordon Aquifer
  - 1. Previously mapped with Floridan Aquifer
  - 2. Primarily used for agriculture, water supply, and industry secondary
  - 3. Tends brackish towards coast
  - 4. 0 line of contour close to Walterboro, tends to be below sea level. Potential for saltwater intrusion
- ix. Example: Gordon Aquifer in Allendale County
  - 1. This aquifer is sensitive to pumping. See diurnal signal
- x. Crouch Branch Aquifer
  - 1. Primarily used for agriculture and water supply
  - 2. Few wells permitted due to productive aquifers at shallower depths
  - 3. Minor declines in water level up dip
  - 4. Don't have any wells to represent water's surface
  - 5. When you get close to the coast the sediments get finer so there's less usability
- xi. McQueen Branch/ Charleston/ Gramling Aquifers
  - 1. Primarily used for water supply, industry, and golf in LSS
  - 2. Few wells permitted in coastal counties due to productive aquifers at shallower depths. Gramling is used in Hilton Head
  - 3. Minor declines in water level up dip
  - 4. Not many wells predevelopment
- xii. Example: Well cluster site in Aiken County
  - 1. Long term decline until the late 2010s, slow uptick
- xiii. Example: Gramling Aquifer on Hilton Head Island
  - 1. Pretty large decline but leveled out now
  - 2. Don't have water use data, mostly observe from a mapping standpoint
  - 3. Now that we're not moving on with the model, we can see what info we're missing.
- xiv. Cone of depression in Savannah, GA
  - 1. May and September of 1998, have a big cone of depression, pulled water direction and quality towards Savannah
  - 2. Pumping at Hilton Head started in the 1950s but gradient had already been reversed
  - 3. 2010 GA Water Stewardship Act caused the cone to rebound

- a. Q: what did they do to fix it? A: capped some of it and started taking water out of the Savannah River
- 4. Q: what effect did dredging have on the groundwater? A: nothing yet
- xv. Saltwater Intrusion at Hilton Head
  - 1. HHI is susceptible to saltwater intrusion due to surface and near surface geology
  - 2. Pumping in both HHI and Savannah are factors involved in saltwater intrusion at HHI
  - HH Public Service District employs several water management strategies to support freshwater supply- conjunctive surface water use, aquifer storage and recover, and reverse osmosis of Middle Floridan
- xvi. Coastal GA Regional Water Plan
  - 1. Coastal GA Region includes 9 counties, 2 border SC
  - 2. Groundwater is mainly from the Floridan aquifer and supplies 65% of the Coastal GA Region
  - 3. Modeled aquifers have sufficient groundwater to meet forecasted needs until 2060, but saltwater intrusion is an issue
  - 4. Historic groundwater withdrawals in both Savannah and HHH have contributed towards the inland movement of saltwater plumes. Plumes would continue to exist well into the future even if all groundwater withdrawals were eliminated
  - 5. Q: Orange County and Irvine have the same issue as Savannah and HH. We put in massive amounts of recycled water injection wells which reverse the process. This has been done for 20-30 years in other areas, what's the barrier? A: We are using treated surface water and treated water from the middle floor and aquifer to put down and keep in the aquifer for times needed. Don't know if were creating a freshwater bubble to keep saltwater intrusion at bay
  - 6. Q: has any other RBC made that recommendation? A: no
  - 7. C: most recycled water is going to the golf courses, so if you want to use something to create a barrier, its going to have to be surface water or reworked water
  - 8. C: I want to know what's going into my drinking water

## xvii. Summary

- 1. Groundwater supplies over 50% of the basin's water excluding energy production
- 2. Groundwater level data and potentiometric maps illustrate changes in groundwater storage and hydrologic gradients over time in response to climate and water use
- 3. Saltwater intrusion continues to be an issue at the coast in HH, reduction in pumping in both SC and GA is required to stop the plume growth

- 4. Q: we have data centers being built around the country including SC that use a lot of water to cool computers. Does anybody know if that is recycled or captured after it's gone through a data center? A: so much heat that almost all of it evaporates. Some have big conservation programs
- 5. C: an issue is those centers being allowed to have groundwater capacity rights
- 6. C: see that technology keeps getting better. Can turn salty groundwater into drinking water supply is a matter of what kind of infrastructure ad technology you can put into it
- 7. Plan is to finish developing the ground water demand, then look at historical demands. This framework is based on water quantity not quality.
- 8. Did groundwater modeling in Edisto, useful takeaways were identifying areas when we looked at 2070 projected demands where there was going to be potential depressions and draw downs and to see where we need more monitoring
- 9. A: Middendorf is no longer called that because it covered several aquifers and confining layers so changed names because there were several productive areas
- Low Country and Western Groundwater Management Plans and Capacity Use Areas (Joe Koon, SCDES) 1:15– 1:50
  - a. Water quantity programs
    - i. Groundwater use and reporting
      - 1. Since the 1970s
      - 2. Issue permits in designated capacity areas of the coastal plain over for use over 3 million gallons in any month
      - 3. Users outside of CUA must register wells if well or well system will use over 3 million gallons in any month
      - 4. All registered and permitted groundwater withdrawers report annual water use to the Department
    - ii. Surface water withdrawal, permitting, and reporting
      - 1. Since June 2012
      - 2. Issue permits/ registrations statewide if over 3 million gallons in any month
      - 3. All registered and permitted surface water withdrawers report their annual water use to the Department
  - b. What is a capacity use area?
    - i. An area, designated by the Board, where excessive groundwater withdrawal presents potential adverse effects to the natural resources or pose a threat to public health, safety, or economic welfare or where conditions pose a significant threat to the long-term integrity of a groundwater source, including saltwater intrusion

- ii. Permitting in a way to protect the resource so that we can maintain our water resources for development also requiring conservation plans for users to prevent waste
- iii. Waccamaw, **Lowcountry**, Trident, Pee Dee, **Western**, Santee-Lynches. Most established with DHEC authority
- c. Groundwater Management Planning
  - After notice and public hearing, the department shall coordinate the affected governing bodies and groundwater withdrawers to develop a groundwater management plan to achieve goals and objectives stated in Legislative Declaration of Policy. In those areas where the affected governing bodies and withdrawers are unable to develop a plan, the department shall take action to develop the plan
  - ii. Process: convene planning workgroup, open house forums, finalize plan and submit to DHEC board
  - iii. Aspects of water use addressed in groundwater management plan: current groundwater sources used, current water demand by type and amount, current aquifer storage and recover and water reuse, projected population and growth, projected water demand, projected opportunities for ASR and water reuse, projected groundwater and surface water options, water conservation measures
  - iv. Table of contents: executive summary, introduction, definitions, geopolitical structure, regional description, groundwater level trends, current level trends, current groundwater demand, groundwater demand trends, population, growth, and water use projections, groundwater management strategy, groundwater management plan reports
  - v. Groundwater management goals: ensure sustainable development of the groundwater resource by management of groundwater withdrawals, monitoring of groundwater quality and quantity to evaluation conditions, protection of groundwater quality from saltwater intrusion (Lowcountry CUA), promote education awareness of the resource and its conservation (Western CUA)
  - vi. Groundwater management strategies: identify areas where a leveling and/or reduction in pumping is appropriate, review of permit applications based on demonstrated reasonable use, establish a comprehensive groundwater monitoring program, establish a conservation educational plan for the public and existing groundwater withdrawers, regulation and planning, establish a plan for continual stakeholder engagement and awareness of groundwater development (only in Western and Santee-Lynches CUA)
    - Q: What does 2 mean? If I'm permitted for 50 mgd and I use 5, now what? A: we reach out to the permittee and have a discussion to confirm the water use is accurate and if they anticipate that to continue. If so, we reduce the permanent volume to 20% above the 5 mgd to give extra capacity. Have the authority with the capacity use program

- 2. Q: if growth is anticipated, they may not have been using the water but want to be able to. What is demonstrated reasonableness? A: we will have a conversation with the permittee before we do any reductions and base that on historical use over past 5 years.
  - a. C: last 5 years is not indicative of the future. A: sure, but many of the capacity users have been using for 10-30 years so we have historical use patterns. And if they demonstrate the need and its reasonable.
  - b. C: ag might request more than needed in case there's a drought. A: look at the type of crop, how many acres, calculate what reasonable water use would be and compare with historical use
- 3. Q: why are the rules different for ground and surface water? A: we do encourage conjunctive use. Began developing the law '09, got it done in '11
- d. Assessment and evaluation reports
  - i. Every 5 years total annual groundwater withdrawals are compiled and compared to hydrographs and aquifer potentiometric maps
  - ii. All permitted withdrawers, permitted limits, and average groundwater withdrawals are listed
  - iii. Withdrawals are evaluated by category and aquifer
  - iv. Areas of aquifer stress are identified
  - v. Recommendations and renewal restrictions are listed as appropriate
- e. Capacity use area assessments, evaluations, and renewals
  - i. Lowcountry: 2021 assessment and evaluation report, 2022 permit renewal, 2026 assessment and evaluation report, 2027 permit renewal
  - ii. Western: 2023 assessment and evaluation report, 2024 permit renewal, 2028 assessment and evaluation report, 2029 permit renewal
  - iii. Q: are the 2021 and 2023 assessment evaluation reports posted online?A: Yes. Have reports separated by capacity use areas, will also have groundwater management plans
  - iv. Q: is the general tendency that you're seeing in this part of the world that the withdrawals are increasing at a fairly rapid rate? A: can't answer for these areas specifically. Tricky to assess trends in groundwater usage
  - v. Q: how do you get your data? A: Users report data on an annual basis. Not metered in all instances
- 7. Upcoming Schedule and Discussion Topics

1:50-2:00

- a. Will finish drought recommendations in November
- b. Thursday October 3, 2024
  - i. Savannah River Site field trip
    - Take water out of the ground/ river, have our own treatment facilities to create domestic drinking water. Have our own sanitary sewer, pump house, monitoring and remediation processes
    - 2. 300 square miles

- 3. Savannah River Ecology Lab. Run by UGA. Inside tour. Famous alligator
- 4. Intake on the Savannah. Nearby is a sanitary sewer, make steam, biomass plant, facilities that use a lot of water
- 5. Phytoremediation
- 6. Very few places to eat
- 7. 10-2 with half hour lunch break
- 8. Jeff will provide a bus
- 9. SRS badge office on SRS 1. Get a secure badge
- 10. Go to website, name, address, US citizen, social security. Need to have certain types of ids
- 11. Contraband list
- 12. Can still happen with rain
- 13. Pretty interesting place

Meeting adjourned: 2:05 PM

Minutes: Taylor Le Moal and Tom Walker

Approved: 11/7/24

**RBC Chat:** 

11:26:46 to Thomas Walker(direct message):

It seems like there is a plan in place that is working. Just my two cents

11:27:00 From Thomas Walker to Everyone:

10 min break

11:27:08 From Thomas Walker to Everyone:

11:35ish

11:55:57 to Thomas Walker(direct message):

I would suggest that it be similar to what we do with the Comprehensive Plan. It is reviewed and updated every 5 years with a requirement to update every 10 years.

12:02:45 to Thomas Walker(direct message):

A question, would the water source and capacity of the different utility providers cause differing impacts on their capacity and drought impact?

12:06:27 From Thomas Walker to Everyone:

break until 12:25 pm

12:42:51 From Thomas Walker to Everyone:

sorry we dropped here momentarily

14:05:09 From Thomas Walker to Everyone:

adjourned