

Upper Savannah River Basin Council

September 11, 2024 Meeting Minutes

RBC Members Present: Alan Stuart, Katie Hottel, Melisa Ramey, Jill Miller, Daniel Milam, Mack Beaty, Mark Warner, Harry Shelley, Scott Willett, Cole Rogers, Jon Batson, Tonya Bonitatibus, Reagan Osbon, Jeff Phillips, & John Hains

RBC Members Absent: Billy Owens (Don Todd, alternate, present), Chuck Connolly, Cheryl Daniels, Tim Hall, Dan Murph, Will Williams, & Tonya Winbush

Planning Team Present: John Boyer, Ashley Reid, Kirk Westphal, Joe Koon, Scott Harder, Alexis Modzelesky, Hannah Hartley, Tom Walker, & Jeff Allen

Total Present: 32

1. Call the Meeting to Order (Jill Miller, RBC Chair) 10:00–
10:10
 - a. Review of Meeting Objectives
 - b. Approval of Agenda
 - i. Agenda approved
 - ii. Motion to approve made by Harry Shelley – 1st and Scott Willett – 2nd
 - c. Approval of July 10th Minutes and Summary
 - i. Minutes approved
 - ii. Motion to approve made by Mack Beaty – 1st and Daniel Milam – 2nd
 - d. Announcements and Housekeeping Items
 - i. None

2. Public Comment (Ashley Reid) 10:10–
10:15
 - a. Public Comment Period
 - i. none
 - b. Agency Comment Period
 - i. none

3. July RBC Meeting Review (Ashley Reid and John Boyer) 10:15–
10:20
 - a. July updates to Savannah modeling
 - i. Updated capacity and stage-storage curves for USACE lakes
 - ii. Updated safe yield of reservoirs

- iii. Evaluated alternative 2 compared to current operating rules
- iv. Reevaluated synthetic drought conditions
- v. Tested impact of drought plan triggers and responses
- b. Example drought plan triggers
- c. Example: ARJWS drought plan
 - i. Lake Hartwell graph

4. Introduction to Draft River Basin Plan Chapters 2 and 3

10:20–

10:30

- a. No drafts, they're still being finalized. Introduction to the chapters
- b. Chapter 2
 - i. Description of the basin
 - 1. Physical environment
 - 2. Subbasins
 - 3. Land cover
 - 4. Geology
 - ii. Climate
 - 1. Drought and drought conditions
 - 2. Flooding
 - 3. Tornados
 - 4. Hurricanes
 - iii. Natural resources
 - 1. Soils
 - 2. Minerals
 - 3. Vegetation
 - 4. Fish and wildlife
 - 5. Federal and state endangered listed species
 - 6. Natural and cultural preserves
 - 7. Agricultural resources
 - 8. Livestock operations
 - 9. Irrigation
 - 10. Census of Agriculture info
 - iv. Socioeconomic info
- c. Chapter 3
 - i. Overview of water resources
 - 1. Rivers and lakes
 - 2. Gauging stations
 - 3. Hydrographs
 - 4. Drought conditions
 - 5. Surface water development basin- reservoirs, hydropower, dams
 - 6. Surface eater concerns
 - 7. Water quality
 - 8. Surface water assessment tools

9. Groundwater resources

- d. 4 weeks to review and comment and additional opportunity to comment with entire draft
 - e. Q: are all the basins using the same census info A: yes, generally use the same census info. Basin plans are consistent for chapter 2
 - f. C: keep the same info and add on if there is extended series
 - g. Intent is to try to get info to you earlier, week ahead of time
5. Review and Refinement of Planning Process Recommendations (Ashley Reid and John Boyer) 10:30–11:00
- a. Planning process, technical, and policy, legislative and regulatory recommendations
 - i. RBC can make recommendations at basin wide and state level
 - 1. Suggestions for improving the river basin planning process
 - 2. Considerations for additional technical info or tools
 - 3. Potential changes to state policy or existing regulatory or legislative environment that would benefit the water planning process
 - b. Planning process recommendations may include
 - i. Changes to the RBC membership, bylaws, meeting schedules, or procedures
 - ii. Ideas to improve communication among RBCs and other groups
 - iii. Funding needs and sources of funding
 - iv. Improvements to the public outreach process
 - v. Implementing the RBP and continued RBC activities and actions
 - c. Green, yellow, red bucket approach
 - i. Green- recommendation needing only minor revisions, clear RBC consensus
 - ii. Yellow- not full RBC support, may revisit to see if consensus can be achieved with revisions
 - iii. Red- minimal RBC support, no clear path to consensus, drop
 - d. RBCs should develop and implement and engagement plan to improve awareness and build support for the recommendations, actions, and strategies identified in the RBP
 - i. Should identify target audiences, identify means and methods for engagement, leverage existing mechanisms
 - ii. Agreement (green)
 - e. Elected officials should be invited and considered to participate on the RBCs as part of the local government water interest category
 - i. Agreement (green)
 - f. SCDES should develop a strategy for maintaining membership and sustaining the RBCs
 - i. C: Later recommendation that has to do with the scope of the group and future efforts

- ii. C: Within manufacturing, look at who are the major water users
 - 1. Does every basin have a manufacturing person?
 - 2. Need a plan to reach out to manufacturing lobbyists
 - 3. Add SC Manufacturing Association to first recommendation
 - iii. Make sure that slots are filled
 - 1. Q: do we have anyone that dropped out? A: Carl
 - iv. Agreement (green)
 - g. Following development of initial RBP, RBCs should work with SCDES to identify scope of future RBC activities and help develop funding needs and requests
 - i. Agreement (green)
 - h. Future water planning efforts should consider increased collaboration between all of SC's RBCs
 - i. Agreement (green)
 - i. Any other ideas bout RBC composition, recruitment, meetings, or collaboration?
 - i. Last meeting, Scott brought up Upstate collaboration with 10 at the Top
 - 1. Saluda recommended Saluda/ Broad/ US IRBC
 - 2. Q: Is it the same footprint as the Upstate SC Alliance? A: covers down to Abbeville
 - 3. C: instead of developing another committee, should convene a meeting of all representatives who are interested
 - 4. C: data show there's no problem. Why expand if we don't have real problems?
 - 5. Holding regular meetings for all interested groups statewide to provide opportunities to work together
 - j. A committee consisting of representative from each RBC should be established to help SCDES identify and prioritize recommendations that were made in each RBP for inclusion in the State Water Plan (red, replaced)
 - k. During 2025, the RBCs should initiate and coordinate discussions with SCDES to begin the process of updating the State Water Plan
 - i. Combine the 2
 - ii. C: RBC is guaranteed to be on whatever steering committee the state forms
 - iii. Each RBC should have representation on the steering committee established to replace PPAC
 - iv. Q: Assuming that RBCs are going to continue. Should we say each RB is represented?
 - 1. Recommend RBCs continue
 - v. C: RBC members should have a voice in the room even if they are not on the committee. RBC members can talk about the thought process in the room
 - vi. Is it important for RBCs to have an active voice or is representation enough? How involved is the full RBC?
 - vii. Q: how many basins must recommend something to put a recommendation in the state plan?
 - viii. Add meaningfully contribute to first bullet
 - ix. At least 1 member of RBC

- I. The SC legislature should continue to fund state water planning activities, including river basin planning
 - i. Its appropriations not recurring money. Need recurring money to be a long-term process
 - ii. Q: is it a law that it has to be 5 years? A: not a law, more regulation
 - iii. Q: what is the appropriate cycle length to go state plan to state plan? 5 years isn't working. A: could do 5 if there was consistent funding
 - iv. C: We really don't have a plan. We haven't had one since 2005. What are we doing all this for, guess what, we went through droughts, the sun came up, the lakes didn't dry up, and we got along, why do we keep layering more and more on this. Why are we doing all of this?
 - v. C: This isn't 2004 and this is why we're doing it. This isn't too complicated.
 - vi. C: GA updates regional plans every 5 years, but they don't update a state plan. All 11 regions do it at once
 - vii. C: We've gotten around 500,000 more people in GVL over the last 10 years
 - viii. C: takes a while for recommendations to be implemented
 - ix. C: timeline depends on how fast you're growing and how strained water resources are and how quickly climate is changing. Might be different in different areas. Maybe focus on 1 part of it.
 - x. yellow
- m. A grant program should be established to help support the implementation of the actions and strategies identified in each RBC's RBP.
 - i. GA Seed Grant program- establishes funding for projects related to supporting or exploring practices. Seed Grant has support by a council, led by a utility, then grant program matches the funding. Match grant program. Help to further objectives of plans.
 - ii. Tied to recommendations
 - iii. Important to highlight specific recommendations to trigger funding
 - iv. You decide what your priorities are, and Seed Grant helps fund the priorities. Chair meets with applicant to make sure the project is in line with the objectives and recommendations of the plan
 - v. Yellow
 - vi. Get to hear from GA Seed Grant people in October
 - vii. Some federal funding that's available to implement some of these actions
 - viii. EQIP funding through NRCS- federal money that agricultural landowners can apply to implement BMPs on their property like livestock exclusion, alternate water sources. Base amount is 75% of the projects, up to 90%. Upstate Forever stacks on top of that and do a cost share
 - 1. Q: is that annual? A: NRCS applications are annual but Upstate Forever is a 3-year cycle
 - 2. C: most USDA funding was for row crops, EQIP came along for other things
 - 3. Stacking funding is more effective to give money to more people

4. SC receives a portion of the funding that comes through NRCS. \$4-22 million
- ix. NC program called AgWRAP, specifically focused on agricultural water resources
 1. Helps farmers identify opportunities to increase water use efficiency, availability and storage implement BMPs to conserve and protect water resources
 2. State program funded by state money
 3. How much would SC benefit from a similar program? Would like more info.
 4. Only had \$1 million, had a lot more in requests. Allocated a small amount to each county, 75/25
 5. NC has tobacco money
 6. Sometimes can't stack federal on federal money. State money would be useful
 7. Examples of types of projects
 8. C: Would like to study it first before saying yes

Break

6. Discussion and Development of Technical Recommendations (Ashley Reid and John Boyer) 11:00–12:00
 - a. Technical and program recommendations may include
 - i. Need for more data
 - ii. Model improvement
 - iii. Need for additional models
 - iv. Improved water use data, population data or estimates, water demand estimate, land use data, etc.
 - v. Recommendations for technical studies to improve knowledge of specific issues
 - vi. Need for additional technical training for the RBC members
 - vii. Improved instream flow requirement info
 - b. Topics discussed that could be technical recommendations in US
 - i. Sedimentation
 - ii. Impacts of changing land use on streamflow characteristics
 - iii. Impacts of drought on fishkills due to low dissolved oxygen
 - iv. Potential pollutants of concern for next phase of planning
 - c. Technical recommendations discussed by Saluda RBC
 - i. Add more sample sites in the Blue Ridge/ use less data
 - ii. Encourage expansion of the ambient water quality monitoring network
 - iii. Use of RBP to highlight areas where water is more abundant and amenable to growth

- iv. Encourage developers work with water utilities to ensure adequate water availability and infrastructure
 - v. Consider use of the RBP as a tool for local comprehensive plans and economic development
 - vi. Encourage leveraging of USDA EQIP programs for regenerative farming practices that minimize soil disturbance, soil loss, and improve soil health
 - vii. Study impact of land use changes on streamflow and identify and prioritize land for conservation
 - viii. Provide more incentives to landowners to not sell their land to development and place them in permanent conservation easements
- d. Technical recommendations identified by Broad RBC
- i. Consider incorporating future climate projections and/ or historical long term climate info such as dendroclimatology to inform drought risk and/or drought scenarios into modeling analyses to better address potential supply side changes in hydrology
 - ii. Identify funding mechanisms to support continued USGS efforts to maintain and expand streamflow gages
 - iii. Fund and establish a mesoscale network of weather and climate monitoring stations in SC
 - iv. Identify financial impacts of increased sedimentation on reservoirs and water resources and communicate the results to local governments to demonstrate the value of riparian buffers, sedimentation and erosion control measures and other policies and controls that reduce sediment generation and transport
 - v. Continue to consider ecological flow standards, including new and/or improved data, as it becomes available
 - vi. While the RBC should maintain its focus on the assessment of water quantity, future planning efforts should include evaluation of surface water quality, including nutrient loading and sedimentation, which is important to maintaining affordable public water supplies and the ecological health of the streams, rivers, and lakes
 - vii. Further investigation and potential piloting of low-tech, process-based approaches to stream restoration
 - viii. The Facilitator should create an online library of, or a catalog of links to, technical info that will enhance the RBC's technical understanding of water resources, concepts, and issues
- e. Discussion
- i. Q: we have a SWAM model. Can the model be adapted to other things for water quality? A: no, it's a water quantity model. Could help inform other models. There are other models for water quality.
 - ii. Q: how hard is it to use these models? A: getting output from SWAM isn't hard, but it depends

iii. Sedimentation

1. Army Corps lakes have seen 10-17% sedimentation since they've been built
2. Numbers sound suspicious
3. Should get technical reports
4. For Spartanburg, we figured out the rate of sedimentation based on a 15-year span with bathymetric surveys and incorporated that into the SWAM model
5. Broad and Saluda focused on where is the sediment coming from. Not necessarily coming from development, but from scour of existing streams
6. Q: scouring and stream bank erosion is directly related to development and land use changes. A: increased development increases the flashiness of streams with increases the scour
7. Encourage green infrastructure/ stormwater ordinances
8. Q: does SC have effective regulations against sediment runoff? A: hasn't been long for regulation
9. Encourage developers to adhere to the stormwater ordinances

f. *Lunch*

12:00–12:20

g. Discussion

i. sedimentation

1. CSS modeling. Don't have to look at modeling any specific strategies to eliminate gaps because we don't have any shortages, so there is still funding left if interested in modeling a rate of sedimentation from historical and current bathymetric surveys and extend that rate to see if there are potential water supply shortages in 2070
 - a. Q: Lake are so large; would the studies be effective? A: would agree but can't say for certain
 - b. C: put dollar values on sedimentation
 - c. Q: what do we do with the output? Do we change the scope or make technical recommendations about sediments today? A: could be both. Spartanburg water was interested in financial impacts, both direct and indirect.
 - d. By next month or November, if you're interested, we could do the modeling where we look at increased rate of sedimentation to figure out is there an impact and would you have a water supply shortage
 - e. Q: is there any agency or group that classifies streams statewide and ranks them based on their state and

assesses their continued demise/ restoration? A: not that I know of

- f. Can have a biodiversity impairment
 - g. Sedimentation Yellow
 - h. Want to craft recommendations around sedimentation
 - i. Office of Resilience has overlap with their Resilience and Risk Reduction Plan
 - j. Streamflow characteristics yellow, fishkills yellow
2. Discuss and identify potential pollutants of concern to explore
- a. Bacteria, nutrients, sediment
 - b. Q: Is there study needed or just regulations? A: advocate for instream nutrient requirements
 - c. Green/ yellow
 - d. Q: have any of the other RBCs discussed minimum stream flow requirements? A: sort of. Saluda did, Broad, Pee Dee, LSS had less opportunities. This basin is so focused on the Savannah which is not wadable
 - e. Define what you're actually going to do
- ii. Saluda
- 1. Use RBP to highlight areas where water is more abundant and amenable to growth
 - a. Green
- iii. US
- 1. Direct growth based where water is more abundant
 - 2. Addition of stream gages in watershed
 - 3. Increased river basin transfer
 - 4. Q: did Saluda have a specific reason for expanding the water quality network? A: limited data and there used to be a lot more. Not able to make decisions as well
 - 5. Increasing stream gages and increasing sampling sites
 - 6. Thoughts and ideas we can build into recommendations
 - 7. Not sure what level of detail is needed
 - 8. Incorporate recommendations from recent audit/ study to expand number of stream gauges where it makes sense
 - a. C: What gap do we need to fill about putting in a new gage? Why spend money?
 - b. Yellow
- iv. Broad
- 1. Mesoscale networks
 - a. Q: have you made requests and received funding for them? A: have made requests, not been granted
 - b. Encouraged RBCs to make recommendations to get these

- c. Q: is the purpose to just represent all 46 counties or to be geographically dispersed? A: Scientific decision. Not uniformly distributed
 - d. Yellow
 - e. C: We also need to discuss the Six Mile Pickens WTP – Pickens pulled out. Easley-Central will eventually go away. They'll either build a new plant or buy from GVL water.
- 7. Review of Water Withdrawal Law and Regulations and Overview of SCDES Role in Water Planning (Joe Koon, SCDES) 12:20-12:40
 - a. Transition info
 - i. 7/1/24 DES established- primarily comprised of DHEC's environmental affairs and some DNR programs, including hydrology
 - ii. Water resources division
 - 1. Water quantity (Leigh Anne Monroe)- manages and issues surface and groundwater permits and registrations, writes annual water use report, and capacity use area evaluations
 - 2. Hydrology (Scott Harder)- manages water planning efforts, monitors groundwater wells, creates potentiometric maps, writes various reports
 - iii. Changes to be aware of
 - 1. New email addresses
 - 2. New websites
 - 3. DES now manages river basin planning and state water plan
 - iv. Maintain consistency
 - 1. River basin planning will continue uninterrupted
 - 2. River basin plans are voluntary, not regulatory
 - 3. Santee basin will kick off later this year
 - 4. Overall basin planning process remains the same
 - b. Surface water law refresher
 - i. SC Surface Water Withdrawal, Permitting, Use and Reporting Act section 49-4-10 passed in 2011
 - 1. Regulation 61-119 promulgated in 2012
 - ii. Regulation established a system and rules for permitting and registering the withdrawal and use of surface water in SC
 - iii. Any user withdrawing over 3 mgm in any month must have a permit or registration and report water use annually
 - iv. 3 different types of surface water withdrawers: existing, new and agricultural
 - v. Determining permitted and registered permit volume
 - 1. Safe yield- amount of water available to be permitted
 - a. Calculated at point of withdrawal: 80% of mean annual daily flow

- b. Adjusted for upstream and downstream withdrawals
 - c. Applies to new permits and new registrations
 - d. Registrations are granted if requested volume is within safe yield
 - 2. Minimum instream flows- amount of water to remain in stream
 - a. 20-40% of MADF depending on month
 - b. When streamflow is below MIF users must curtail withdrawals and begin contingency operations
 - c. Only applies to new permits
- vi. Existing withdrawer criteria
 - 1. Not subject to 20-30-40 MIF requirements
 - 2. No public notice requirements
 - 3. Accounts for 94% of permits
 - 4. Most were permitted for the designed capacity of the intake structure
 - 5. Permits are 30-50 year long
- vii. New withdrawer criteria
 - 1. Withdrawals evaluated for reasonableness
 - 2. Public noticed for 30 days
 - 3. Permit duration of 20 years with possible extension to 50 years
 - 4. Withdrawals are subject to MIF requirements
 - 5. Safe yield calculated at point of withdrawal
 - 6. Additional contingency planning shall be required to consider withdrawals more than safe yield
- viii. Agricultural registration criteria
 - 1. Registration rather than a permit, must report their water use
 - 2. Subject to safe yield calculations
 - 3. No expiration dates
 - 4. Safe yield calculated at the point of withdrawal and is the maximum amount that can be registered
 - 5. Not subject to MIF or reasonable use requirements
 - 6. Not required to include any best management practices
- ix. Q: how are the public hearing conducted? A: for interbasin transfers, noticed for 30 days, then hold them, then a common period afterwards. For new permit applications, public notice period of 30 days, then applications in house. If 20 citizens in the affected area ask for a public hearing, we then hold a public hearing, near the location
- x. C: there's a lawsuit challenging the safe yield definition. A: DES has responded to the lawsuit. Can't respond
- xi. C: so new permits are up to 80% of mean daily flow

8. Discussion and Development of Policy, Regulatory, and Legislative Recommendations (Ashley Reid and John Boyer) 12:40–1:50
- a. Broad RBC
 - i. Very broad view (lol)
 - ii. Edisto RBC wants to change the law to use median instead of mean flow
 - iii. Reasonable use criteria should be applied to all surface water withdrawals, like groundwater
 - 1. Q: is this of significant concern to the US? A: haven't thought about it
 - 2. Q: do they sell a portion of their withdrawal capacity? A: no, the permit can be transferred but you couldn't water broker under your permit
 - 3. It may not apply much in this basin
 - 4. Consensus that reasonable use criteria should apply, eliminates the loophole
 - iv. Laws that allow for regulation of water use need to be enforceable to be effective. The current water law, which grandfathers most water users, can be improved to support effective management of the state's water resources
 - 1. Surprised Broad put forth this recommendation, they're heavy on the water utility side
 - 2. C: pretty vanilla recommendation
 - 3. C: water utilities probably have a better understanding of future water needs
 - b. Homework: think about what you heard from Joe and Hannah about the current water law regulations, consider what the Broad came up with and then decide if you like/ dislike them. Be prepared for the next meeting
 - i. C: for the reasonableness criteria for all existing permits, they have to present some rationale about why you're using this water. A: not going to disagree, but some folks do this. Substantial number of industrial intakes that are in place that have a permit but are no longer using it. Some discussion with agencies about the length of the permit whether 30-50 years is reasonable, or it should be shorter
9. Upcoming Meeting Schedule, Topics, and Draft Chapter Review Schedule (Ashley Reid and John Boyer) 1:50–2:00
- a. 10/9/24
 - i. Learn about the GA EPD Regional Water Plan Seed Grant Program
 - ii. Continue to discuss and develop technical and policy, legislative, and regulatory recommendations
 - iii. Begin to review and discuss draft river basin plan chapters as available
 - iv. Begin to develop implementation plan
 - v. Sedimentation analysis
 - vi. Planning to schedule the first IRBC with LSS

vii. Someone has a 10 inch top bill, back flow restrictor for sale

Meeting concluded at 1:56 PM

Minutes: Taylor Le Moal and Tom Walker

Approved: 10/9/24

RBC Chat:

10:00:09 From Tonya's iPhone to Everyone:

Hey Everyone I have a mandatory work meeting at 10am so I will be late joining today. I'm here but not able to join in discussion until about 1030ish...thanks for understanding

10:00:24 From Thomas Walker to Everyone:

thanks tonya

10:24:24 From Tonya's iPhone to Everyone:

I'm back

11:30:26 From Thomas Walker to Everyone:

break until 1140

12:14:38 From Thomas Walker to Everyone:

break until 1235

13:57:11 From Thomas Walker to Everyone:

meeting adjourned