

Saluda River Basin Council

April 19, 2023, Meeting Minutes

RBC Members Present: David Lawrence, Rebecca Wade, Josie Newton, KC Price, Michael Waddell, Katherine Amidon, Eddie Owen, Ed Bruce, Patrick Jackson, Rick Huffman, Jason Davis, Justin McGrady, Jay Nicholson, Kevin Miller, Charlie Timmons, Thompson Smith, Larry Nates, David Coggins, Rett Templeton, Paul Lewis, Joel Ledbetter, Brandon Grooms, Mark Farris, Melanie Ruhlman, Jeff Boss, Devin Orr, Sharon Appell, & Robert Hanley

RBC Members Absent: Jim Moore

Planning Team Present: John Boyer, Tom Walker, Scott Harder, Leigh Anne Monroe, Jeff Allen, Andy Wachob, Joe Gellici, Priyanka More, Alexis Modzelesky, & Hannah Hartley

Total Present: 51

1. Call the Meeting to Order (John Boyer) 10:00–10:10

John Boyer called the April 19th meeting of the Saluda RBC to order at 10.00. He introduced the meeting structure and reviewed the meeting objectives, including learning more about the State Water Planning Framework, surface water laws and regulations, water resources of the Saluda River basin, select process metrics, and work toward development of RBC Visions and Goals statements. Members approved the RBC meeting agenda (Michael Waddell – 1st and Paul Lewis- 2nd) and also the approval of the March 22nd meeting minutes and summary (Kevin Miller – 1st and Katherine Amidon – 2nd).

Two RBC members introduced themselves; David Lawrence introduced himself and stated his willingness to be part of the planning. Devin Orr works for the SCRWA and discussed an upcoming Forests and Water consortium event. Katherine Amidon talked about the Confluence conference this year in South Carolina covering statewide planning processes and policy, including South Carolina, North Carolina, and Georgia.

2. Public and Agency Comment (John Boyer) 10:10–10:15

There were no public comments or agency comments.

3. March RBC Meeting Review (John Boyer) 10:15–10:30

John Boyer reviewed the March RBC meeting and aimed to ensure members were up to date with the planning framework. He asked, "How long is our river basin planning horizon?" Answer 50 years. There are four phases of the RBC Planning Process. What is the 3rd phase? We will look at water management strategies by evaluation and recommendation. Which one is not a guiding principle identified in the planning framework? The answer is surface water resources should be prioritized in the Upstate and Midlands since groundwater resources are plentiful in the Coastal Plain. RBCs will make most decisions by consensus and attempt to reach consensus through: (Ans. Interest-based negotiation). Interest-based negotiation is a problem-solving approach to conflict that focuses on needs, desires, and concerns rather than positions.

Positions: Anytown's Position: we want at least 40MGD from the Happy River; ACME's Position: we want 20 MGD for our operation. Happy River's Position: We want the flow to remain above 10MGD in the River.

What are their Interests? Anytown, why: we need at least 40 MGD to serve our residential and commercial customers and protect public health.

ACME Industries, why: we need at least 20 MGD to support full production of our widget.

Happy River Guide Service, why: we want to leave 10 MGD in the river so fish can survive and reproduce.

How Might conflict arise? Anytown withdraws 40 MGD, ACME industries want 20 MGD, but any takes 15 MGD and must reduce production widget, and Happy River Guide Service only 5 MGD is left in the river, which impacts fish survival and Happy River's business.

Addressing interest in resolving conflict: Anytown still withdraws 40 MGD but treats and provides 10 MGD of reclaimed water to ACME. ACME industries now only need to withdraw 10 MGD from the Happy River to supplement the 10 MGD reclaimed water from Anytown and support full production of their widget. Happy River Guide Service 10 MGD is left, which supports fish survival and Happy River's business.

One last question: True or false: RBC Members should wait to divulge their water-related interests and concerns until after the Draft Saluda River Basin Plan is prepared and we perform the "Test of Consensus." The answer is false.

Scott Harder presented the Planning Framework Overview, contents of Planning Framework:

Section 1. Executive Summary

Section 2: Introduction: these sections describe the purpose and importance of state and river basin planning, Role of State Water Planning Process Advisory Committee (PPAC), Guiding Principles, and Regulatory framework.

Section 3: River Basin Planning Process: this explains how the River Basin Plan will be developed, the roles and responsibilities of (River Basin Councils, State, and Federal Agencies, Contractors and PPAC), Stakeholders/public participation, and Coordination with other planning bodies and committee.

Section 4: Methodologies for Evaluating Water Availability: this section describes the Hydrologic models used to evaluate water availability, four scenarios for RBC evaluation, and Approach to evaluating water management strategies. It also has some definitions, including Surface and Groundwater Availability and Surface and Groundwater Shortage. This method will be based partly on methodologies used in Texas for evaluating water availability and provides consistency, that is, designating a common set of definitions and processes to use across the State. However, the gap analysis is the big picture of using this method; the RBC will determine where and when demand exceeds supply under varying demand scenarios and decide how to manage water to close the gap. The purpose here is to identify those gaps and develop a water management strategy to address those gaps.

Surface Water Demand Scenarios: we will review four scenarios for each River basin Council including Current Surface Water Use, Permitted and Registered Water Use Scenario, Moderate Water-Demand Projection, and High Water-Demand Projection. These four scenarios will enable us to understand the current water conditions; here, we looked at the 10-year average, look at any functional registration that allows us to pull maximum amount of water, and for the water demand projections, we look at the effects of population growth, moderate economic growth, and global climate conditions.

Question: where we have done something just using the current return and ratio, is there any reason to do something different in this case?

Answer: keep the ratio

Question: how many years is the permit?

Answer: learn about it in the next PPT (it depends)

The scenarios will focus on “water demand” instead of “water supply.”

The RBC can also recommend additional water demand scenarios based on different assumptions used in existing projections (more aggressive growth rate, for example), and new water-demand projection scenarios must be submitted to SCDNR in writing by the RBC for consideration.

Saluda Surface Water Model (SWAM) is a decision-making tool used to assess water availability and management strategies and will support the development of River Basin Plans.

Technical Advisory Committee: the purpose is to provide the State agencies and River Basin Councils with technical assistance and support during the development of River Basin Plans and the new State Water Plan. The role of the committee is to advise state agencies on any new data, model revisions or extensions, and alternative modeling platforms that could be used for planning purposes, approve the use of supplemental modeling platforms in the planning process and advise RBCs on model scenarios and assist in the interpretation of modeling results. In addition, the Technical Advisory Committee primarily serves as a “reactive” body instead of a “proactive.” TAC responds to technical questions/issues arising in the planning process as needed.

Section 5: River Basin Plan Table of Contents: This section provides a detailed description of each chapter's “minimum requirements”; RBCs should generally adhere to this organizational structure and have some discretion to include additional information not explicitly stated in the planning framework. The River Basin Plan chapters are; an introduction, description of the Basin, Water resources of the Basin, Current and projected Water demand, Comparison of Water Resource Availability and water Demand, Water Management Strategies, Water Management Strategy Recommendations, Drought Response, Policy, legislative, Regulatory, Technical and Planning Process Recommendations, and River Basin Plan Implementation.

Section 6: River Basin Planning Process Implementation: here, we have four phases of plan development:

Phase 1- orientation, administrative aspects, background information

Phase 2 – technical analyses used to assess water availability.

Phase 3- analysis of water management strategies

Phase 4- preparation of draft and final River Basin Plans incorporating final water management strategies and other recommendations.

Facilitation and plan authorship team are responsible for submitting progress reports after each major phase. This helps to show if things are going well and a sense of accountability for each phase.

Section 7: River Basin Plan Implementation

River Basin Plans are not intended to be static documents but require a 5-year implementation plan. The objectives are based on recommended water management strategies and other recommendations (schedule and budget). The RBCs are required to meet at least annually (between successive iterations of river basin planning) but frequency dependent on objectives and available funding. We also identified some implementation challenges/considerations, including funding, broader stakeholder buy-in, and no regulatory authority.

Section 8: State Water Plan: the major contents include a summary of legislative, policy, process, and program recommendations regarding the State's water resources documented in the River Basin Plan, an evaluation of statewide trends in water and availability, and a summary of each River Basin Plan's water availability analyses and conclusions.

Question about opening up the State Drought Plan for changes

Answer: Not yet, but the Surface Water Law is currently being reviewed by stakeholders.

Question about Planning Framework Addendums

Answer: Scott explained the process of modifying the planning framework through addendums.

Surface Water Law and Regulation (Leigh Anne Monroe, SC DHEC).

Leigh Anne presented a brief background of water quantity programs which include:

Capacity Use Program has been around since the 1970s primarily to issue permits in designated areas of the coastal plains over 3 million gallons a month (100,000 gallons per day).

Water Use Reporting: all registered and permitted groundwater and surface water withdrawers report their annual water use to the department. They compile this information and produce water use reports, which are available on our website for public use.

Surface Water Withdrawal Program: this program has been around since June 2012, issuing permits statewide if over 3 million in any month.

Surface Water Withdrawals: For Statewide: Active Permits of 199 with 257 intakes and Active Agricultural Registration of 114 with 216 intakes. Saluda Specific: Active Permits 32 with 40 intakes and Active Agricultural Registrations 17 with 33 intakes.

She also highlighted types of Surface water withdrawers, including Existing Surface Water withdrawers, New Surface Water withdrawers, and Agricultural withdrawers. She further explained the existing or Grandfathered” Permits. On January 1, 2011, the existing surface water withdrawers commenced. These existing issues are required to submit operation and contingency plans based on industry standards for conditions when flow is below the minimum instream flow. And permits are designed to be issued for the largest documented historical use, current permitted treatment capacity, and designed capacity of intake structure. Permit duration is a minimum of 30 years, do not exceed 50. The permitted withdrawal amount is based on historical, has no public notice, and the minimum instream flow requirements are subject only to operation and contingency plans. The operation and contingency plan only address appropriate industry standards for water conservation. Also, the public water system must follow its drought plan.

She stated that for the agricultural withdrawer, it is not a permit but a registration that reports their water use, and the registration never expires. The withdrawal amount is based on historical use or requested use, not subject to operation and contingency plan and minimum instream flow. The registration permit cannot be transferred to a new person. The legally available water is calculated to be 80% mean annual daily flow at the point of withdrawal. However, safe yield will be determined at the point of withdrawal and then registered for new or expanding agricultural withdrawals. A proposed withdrawer must request its anticipated withdrawal, and if the withdrawal is not within the safe yield, the registrant may modify its request to a reduced withdrawal quantity that is within safe yield.

For a permit criterion for a new or Expanding Surface Water Withdrawal Permit, the permit duration is a minimum of 20 years, not exceeding 50. The registered withdrawal amount is based on reasonable use criteria. Withdrawals will be subject to a minimum instream flow of 20,30, and 40 percent of the mean annual daily flow. Safe yield will be calculated at the point of withdrawal and shall be considered one factor, supposing withdrawals in excess of the safe yield be permitted: hence, additional contingency planning and a 30-day public notice (mandatory public hearing for IBT). The contingency plan (water

supply uses drought plan) will also help determine if withdrawal will adversely impact current withdrawal and required public notice permit.

Question about criteria for reasonableness

Answer – example of a water supplier and the # of taps is the WS serving? Another example of golf irrigation and how many greens the golf course is irrigating. If a user is below the threshold they don't need a registration or permit

During periods of extreme drought, several water conservation measures are taken to reduce water consumption, including limiting use of site car wash station, rescheduling emergency response drills, communicating to all plant employees the need to minimize water usage, stopping all continuance trench flushes, except when required for safety purposes, and survey all areas to detect and eliminate leaks. And finally, for exemptions, users are exempt from surface water withdrawal regulations, including those withdrawal less than 3 mgm, wildlife management, ponds that are completely contained with no inflow/outflow to tributaries, emergency withdrawal, and hydropower must only comply with being registered and reporting use.

Question: Any registrants below 3 million gallons a month?

Answer: I don't know if we have any for SW users, but it is more common on the groundwater side.

Question: how do you follow up with the withdrawal permits?

Ans. Besides the withdrawal, everyone must submit their water use annually across each month, so we can confirm what they are saying regarding the withdrawals.

Question about agricultural registrations

Ans: everyone has one year to construct the flow intake, and we can withdraw the registration if they do not construct with it.

Question: Is all data self-reported?

Answer: yes all data is self-reported, and we look at historical data and if it is off then DHEC asks the user

Question: does DHEC audit?

Answer: We can but don't currently have the staff to conduct audits.

Break

11:00–11:15

Water Resources of the Saluda River Basin

11:15–11:35

Priyanka More provided an overview of the Saluda River Basin, which is part of the larger Santee River Basin and is entirely located in South Carolina. The basin is made up of the Blue Ridge mountains, the Piedmont region, and the Coastal Plain. The Upper Saluda Basin generally has a higher base flow, while the Lower Saluda Basin has a low base flow and heavy regulation. The basin has seven reservoirs used for hydroelectric power, water supply, and recreation and six hydroelectric projects licensed by the Federal Energy Regulatory Commission. Variable rainfall throughout the basin; Blue Ridge province-75 inches and Coastal Plain -45 inches. Highly variable flows in the basin; the Upper Basin has high baseflow and low to moderate regulation, while Lower Basin has low baseflow and heavy regulation downstream of Lake Greenwood. Planning will focus primarily on the basin's surface water resources having 99% withdrawals from surface water sources.

Questions: Why isn't Holiday's Bridge Dam Hydro in the model? It should be in the model.

Answer: Will look into it and put it in the model

Question about DHEC performing a fine grained analysis hydrograph?

Discussion - Peak flows are higher and base flows are lower trend

Groundwater Resources of the Saluda Basin (Joe Gellici)

Joe Gellici presented an overview of groundwater in the state and noted that most groundwater is in the Coastal Plain Province. Groundwater is the principal water source for rural homes in the basin; low to moderate yields can be obtained from wells across the entire basin, and yields can usually satisfy the requirements of most domestic use and some small irrigation and industrial use.

The Piedmont Hydrogeologic Framework has two layered systems, Saprolite and Rock, and the two types are wells, bored well, and drilled well. The average well depth is 250ft, and the average well yield is 18 gallons per minute. Efforts are being made to identify areas that can produce high-yielding wells using geophysics, and there are approximately 180 wells in the Groundwater Monitoring network report.

Question about DHEC permitting all wells

Answer: only in capacity use areas

Selection of Process Metrics (John Boyer)

11:35–12:00

John Boyer facilitated this session. He stated that process metrics are benchmarks used to monitor the success or failure of the processes and actions taken by the RBC. The main purpose of developing metrics is to track and assess the RBC's performance and the quality of actions taken by an RBC. He noted that the process and progress of the metrics should be easy to understand and measure, promote quality, recognize that preliminary data is often good enough, require human, financial, and /or computational resources, and advance scientific progress. The planning framework suggested process metrics are: that RBC meetings adhere to timelessness; RBCs develop a River Basin Plan within two years of RBC formation; River Basin plans are actionable, logical and address or prevent challenges with a level of detail to be cost-accountable and the process to select RBC members is well documented, transparent and reflects broad-based outreach.

Process Metrics:

1. The process to select RBC members is well documented, transparent, and reflects broad-based outreach.
2. RBCs develop a River Basin Plan By March of 2025.
3. RBC meetings adhere to timelines.
4. River Basin Plans are actionable, logical, and address or prevent challenges with a level of detail to be cost- accountable.
5. Information used and generated during the planning process is shared openly, publicly, and is easily accessible.
6. RBC meeting agendas are focused and promote efficient and productive meetings.
7. RBC members can effectively consider, digest, and understand technical information through presentations, discussion, group learning and self-study.
8. Decisions are guided by best available science.
9. Information is presented in an unbiased manner.

10. RBC members are provided equal opportunity to be heard and express their interests, ideas and concerns.
11. The use and outcomes of models and other tools to assess water availability and evaluate strategies are appropriately documented.

A survey will be sent to determine how effective the meetings are at least 3 times.

Examples of the framework suggested progress metrics: relative water demands are met across sectors accounting for growth over the planning horizon; final River Basin Plan has strong support from the RBC, PPAC, SCDNR, elected officials, and the public, monitoring of source water integrity and drought and irrigation conflicts are identified early by quantitative means and should be resolved without resorting to litigation. These will be fleshed out closer to the end of the planning process.

4. Vision and Goals Development and Working Lunch 12:00–1:45

By the end of Phase 1, the RBC should develop a vision statement and Goals for the basin.

The Vision Statement and Goals should summarize the RBC’s priorities for water resource use and management in the Saluda Basin.

Saluda RBC-Identified Basin Priorities:

Support and Balance Human and Ecosystem Needs, Source Water Protection and Land Management, Maintain Water Storage, Understand and Manage Low Flows, Promote Collaboration and Equity, Use Sound Science and Data, Conduct Public Education and Outreach, and Provide Legislative Recommendations.

Vision Statement: members are asked to think about the vision statement, goals, and Saluda RBC goals, and in our next meeting, based on a majority vote, we will finalize them.

1. The Saluda River Basin plenty of clean water for all
2. A resilient and sustainably managed Saluda River Basin where stakeholders and ecosystem needs are recognized, balanced, and protected.
3. Sustainable quantity and quality water balancing all human and ecosystem needs and uses within the Saluda River Basin.

4. We believe the Saluda River Basin should be a resilient and sustainable system where ecosystem and stakeholder needs are recognized, balanced, and protected.
5. A resilient Saluda River basin that provides a clean, abundant, and sustainable water supply that balances human and ecological needs and uses.

Goals:

The following Saluda Goals are suggested below: (John Boyer and Evan Patrohay)

1. To perform a review and update of the plan every 5 years at a minimum or sooner should a catalytic event occur requiring plan update. This update should rely on the most up to date and reliable data available.
2. Develop and implement a communication plan to promote the strategies, policies and recommendations developed for the Saluda River Basin.
3. Given the importance of water management in the Saluda River Basin, the Saluda RBC shall continue to meet to help manage Saluda River resources under changing conditions. (specific time to come later)
4. Develop management strategies that are science-based, resource availability, and allocation.
5. Meet or exceed South Carolina water quality standards basin-wide.
6. Promote conservation.
7. Develop water use strategies, policies, and legislative re for the Edisto River Basin in order to:
 - Ensure water resources are maintained to support current and future human and ecosystem needs.
 - Improve the resiliency of the water resources and help minimize disruptions within the basin.
 - Promote future development in areas with adequate water resources.
 - Encourage responsible land use practices.

Upcoming Meeting Schedule, Field Trip Ideas, and Topics (John Boyer) 1:45–2:00

Saluda RBC Meeting will be on Wednesday, May 17, 2023- at the Ridge at Laurens (10 AM – 2 PM).

Topics are Basin Climatology, South Carolina Drought Response Act, Low Flow Characteristics and Streamflow Monitoring and Land Use, Socioeconomic and other Characteristics. RBC discussion items include finalizing Vision and Goals and considering Field Trip Destinations. Current field trip plans are

a half RBC meeting and half Field Trip to Laurens WTP in June. Other field trip ideas are: Greenville WTP, Pig Pen Project on the Pig Pen Branch, Saluda restoration projects, agricultural user tour, & a float/kayak trip. John ended by encouraging members to always be at the meetings. Meeting adjourned at 1:58 PM..

Minutes: Iffy Ogbekene and Tom Walker

Approved: 5/17/23

RBC Chat:

09:53:47 From The SC River Guide to Everyone:

Justin McGrady here

09:54:00 From Thomas Walker to Everyone:

thanks justin

11:19:24 From Thomas Walker to Everyone:

15 min break until 1130

12:15:05 From Thomas Walker to Everyone:

lunch break - will start back up around 1230

12:16:13 From Thomas Walker to Everyone:

1235 restart

13:12:34 From Thomas Walker to Everyone:

any comments or preferences from our online rbc members? you can always unmute and chime in at any time.

13:18:40 From jnicholson to Everyone:

My two cents. Take "users" out of the original version of 4 and it hits the nail on the head.

13:22:21 From Thomas Walker to Everyone:

is that the current number 3

13:22:23 From Thomas Walker to Everyone:

?

13:23:13 From jnicholson to Everyone:

no on your question about 3. Yes on keeping it simple

13:24:59 From Thomas Walker to Everyone:

ok, we're going to come back to them in a bit thanks jay

13:25:11 From jnicholson to Everyone:

Reacted to "ok, we're going to c..." with 👍

13:47:58 From jnicholson to Everyone:

think on it

13:58:22 From Thomas Walker to Everyone:

end of meeting thanks