

Santee River Basin Council Meeting No. 8 (Hybrid Format)

Date: July 8th, 2025 Time: 9:00 AM

Location: Santee Interpretive Center

(900 Stoney Landing, Moncks Corner, SC 29461)

Prepared by: CDM Smith

RBC Members Present: Todd Biegger, Sarah Wiggins, Mike Wooten, Alicia Wilson, Michael

Melchers, Riley Egger, John Grego*, Jason Thompson, Allan Clum* (Tony

Hill and Guinn Wallover), Brandon Stutts*, Jeff Ruble*

RBC Members Absent: W.E. Mickey Johnson, Jr., Hixon Copp, David Wielicki

Planning Team Present: John Boyer, Megan Marini, Scott Harder*, Leigh Anne Monroe, Andrew

Wachob*, Joseph Koon, Alexis Modzelesky*, Hannah Hartley*, Kirk

Westphal*, Chris Whitmire (sub for Sam Quinney)*

*Attended virtually

1.0 Call To Order and Welcome

The meeting was called to order at 9 am, with Michael Melchers welcoming the RBC members. Michael stated the meeting objectives and invited the RBC members for approval of the previous minutes and the agenda. Alicia Wilson motioned to approve the previous meeting minutes with a second by Jason Thompson, and the motion passed. The agenda was also approved by the RBC motion, with Jason making the initial motion and a second by Alicia.

John Boyer mentioned the WaterSC meeting on June 12th which included a panel of River Basin Council members including Alicia and Michael. The panel discussed their vision for moving forward after the initial planning stage. It was effective at discussing topics that had not been previously considered and was good to discuss differences faced in the various basins. It was noted that WaterSC Water Resources Working group will have a retreat in August.

John mentioned that Google has advertised, through a request for Information, a funding opportunity to help fund water efficiency projects. Google's objective is to replenish the same amount of water they withdraw through funding water efficiency projects in the watersheds where they have withdrawals.

John reminded the RBC what they accomplished during the June meeting. The RBC approved a suite of planning process recommendations, and continued the discussion of policy, regulatory, and legislative recommendations. The RBC achieved consensus on five recommendations policy recommendations and will continue to discuss several placed into the "yellow bucket".

2.0 Public and Agency Comments

Public comments: There were no public comments.

Agency comments: There were no Agency comments.



3.0 Discussion of Additional Recommendations

Jason presented the following points for discussion:

- 1. There is disincentive for withdrawers to get new permits even when resources are plentiful.
- 2. There is an overestimation of water availability (safe yield allocation) that may lead to stream flows below MIF and potential future shortages.
- 3. An unequal application of surface and groundwater laws and regulations (SY, MIF, reasonable, review periods, etc.) for different types of withdrawals (existing, new permits, and registrations).

Jason proposed the following recommendation: The safe yield definition should be updated using median statistics (80% median rather than 80% mean or average) in recognition that median statistics more accurately characterize typical water availability in stream flows that are non-normally distributed. 80% median (60%+ availability) is a "safer" yield compared to the current 80% mean (40+% availability) and is a compromise in recognition that permittees may not utilize their entire permit allocation.

There was question if the RBC is being too specific in recommending this change to legislation. This safe yield topic has not been substantially presented in the other basins so it will be important to present this position. The RBC agreed that this was a worthwhile recommendation and should be included.

Jason proposed a second recommendation: All permits and registrations requesting volumes above safe yield (80% median) should be required to develop and submit realistic contingency and/or conservation capabilities and plans commensurate with their requested volume which will trigger at minimum instream flows. As is the case in the current law, withdrawers will be allowed to shift back to their primary withdrawal source once the contingency supply has been exhausted.

The RBC discussed how new permittees/withdrawers plan for contingency. Most industries do due diligence to make sure they have contingency plans and multiple water sources available. The RBC agreed that this was a worthwhile recommendation and should be included.

A third recommendation was proposed by Jason: *Minimum instream flows (MIF) and minimum water levels (MWL) should be based on median statistics in recognition that median statistics more accurately characterize typical water availability, since most stream flows are non-normally distributed.* The RBC decided it would like to have more time to look at this and discuss later. It was brought up that this goes against DNR in-stream policy 80% mean is DNR's current in-stream policy.

A fourth recommendation was proposed: When considering MIF and MWL criteria for new permits, SCDES should be allowed to use alternative hydrologic assessments and take into account water quality considerations due to complex hydrology, as is the case in coastal areas impacted by tides. It was noted that for a specific, previous permit with a tidal influenced site, SCDES had considered how salinity influences water quality for the user. This recommendation was approved by the RBC.

Allan Clum presented a recommendation: *The Surface Water Withdrawal, Permitting, Use and Reporting Act (SC Code Sections 49-4-10 and the R.61-119) should be amended to require all surface water withdrawals (existing, new, and registrants) over 3 million gallons per month to be subject to permit requirements and review.* The RBC agreed to put this recommendation in the yellow/green bucket. It would be nice to have some Ag input, so effort will be made to get input from Ag representatives.

The RBC considered and discussed (but did not approve by consensus) a proposed recommendations around changing the Groundwater Use and Reporting Act and Surface Water Withdrawal, Permitting, Use and Reporting Act to reflect a 30-year permit renewal period to facilitate long-term planning efforts, support bond insurance, and protect withdrawers investment in infrastructure.

Another recommendation was made allowing for a withdrawal review to occur as soon as every 10 years if monthly withdrawals by the permitted or registered user are not at least 10 percent of the allocation. The withdrawal review process should consider if the infrastructure being constructed could utilize at least one-third of the allocation and include a mechanism for reduction in the size of the allocation if warranted. A similar recommendation was proposed to enable all registrants to transition to permits of equal allocation quantities if they have utilized at least 10 percent of their allocation in any given month and if the infrastructure present or being constructed could utilize at least one-third of the allocation.

The RBC discussed how groundwater conditions can change within 10-years but 30-years may be too long and may miss the opportunity to correct an issue like a cone of depression in the groundwater table. There was general support amongst the RBC to change groundwater from 5-year renewals to 10-year. The review of groundwater permits should continue at 5-year intervals but the permit renewal could renew every 30-years. There will be further discussion on this recommendation.

Ultimately the RBC conditionally approved the following recommendation: Review periods for groundwater and surface water permit renewals should be re-evaluated, to facilitate long-term planning efforts, support bond issuance, protect withdrawers' investment in infrastructure, and protect the biological, physical and chemical integrity. Existing regulations should be amended to align users' renewal periods and permit requirements for surface water and groundwater withdrawals as much as reasonably possible. The recommendation was placed in the yellow/green bucket until an Ag representative can weigh in.

4.0 Review of Previous Yellow Bucket Policy, Regulatory, and Legislative Recommendations

The RBC considered but did not approve the following recommendation that was developed by the Saluda RBC: Counties and municipalities should prioritize and incentivize native tree canopy protection and permanent vegetation cover within headwater streams and along riparian areas. This basin already has many protections built in.

The RBC considered another Saluda RBC recommendation: *SCDNR/SCDES should review the science behind MIF standards to ensure they are based on best available science to adequately protect designated uses and recognize regional differences.* The RBC agreed to make this recommendation, but lump it with the previous recommendation on MIFs.

The RBC did not reach consensus on the following proposed recommendation, which was common to several other RBCs: The water withdrawal permitting process should specifically assess the permit applications alignment with the current River Basin Plan (or alternatively, the legislatively approved State Water Plan).

The RBC reached consensus on the following recommendation: Require high industrial water users (minimum 3 MGM) purchasing from a municipal supply to report monthly water usage to SCDES, aligning with existing SCDES water use reporting requirements.

5.0 Water Model Updates

John Boyer noted that CDM Smith is working on updating the Santee SWAM model and developing the Current Use Scenario. Catawba basin outflows reflecting future moderate and high scenario demand conditions have not yet provided by the Catawba Wateree Water Management Group's (CWWMG) consultant. CDM Smith still intends to present model results. Will be focusing on demand side strategies like water efficiency and water use control, shouldn't need supply side strategies.

6.0 Introduction to Water Management Strategies

John introduced water management strategies. He defined the following:

- Surface Water Management Strategy a water management strategy proposed to eliminate a surface water shortage, reduce a surface water shortage, or generally increase surface water.
- Groundwater Management Strategy a water management strategy proposed to address a groundwater area of concern.

John reviewed common demand side strategies for each major sector. Municipal, demand-side conservation strategies include water loss control programs, low flow fixtures, recycled water programs, public education, and pricing structure adjustments. Agricultural and irrigation demand-side strategies include practices such as water audits of center pivot sprinklers and retrofits, cover cropping, soil moisture sensors, crop selection, irrigation scheduling, and trickle irrigation. Industrial demand-side strategy examples include water reuse, efficient processes, and water loss control. Thermoelectric demand-side strategies include the switch to combined-cycle natural gas, energy saving appliances, and water use and recycling.

John review typical supply side strategies. New reservoirs, reservoir dredging to reclaim storage volume, aquifer storage and recovery (ASR), water reuse systems, direct potable reuse, and conjunctive use of groundwater and surface water were all noted as examples of supply-side strategies.

John reviewed several examples of southeast area water utilities implementing demand-side strategies Since 1999, the Town of Cary, NC has implemented a three-tiered water rate structure, landscape and irrigation codes, rebates for toilet flappers, residential water audits, monthly water budgets for large irrigators, public education, and a reclaimed water program. Their per capita water use rate has dropped from 114 gpcd in 2001 to 81 gpcd in 2016. John noted that Greenville water also has seen a declining per capita use rate over the last 20 years (from 95 gpcd to 68 gpcd); however, Greenville Water staff suggested that the decline is primarily a result of denser multi-family housing development and less irrigation. Atlanta has seen a per capita reduction from 131 gpcd to 99 gpcd from 2003 to 2018. They implemented pricing structures, toilet rebates, leak detection programs, car wash recycling ordinances, and public education.

John noted that Georgia passed the Georgia Water Stewardship Act in 2010. The Act set water loss control requirements that include completion of an annual water loss audit, development of a water loss control program, development of individual goals to set measures of water supply efficiency, and demonstration of progress toward improving water supply efficiency. These requirements apply to public water systems serving populations over 3,300, so about 250 utilities. The statistics shows that there are a numerous utilities losing a large percentage of their water (e.g. more than 25 percent water loss).

John explained that the CWWMG implemented a multi-phased approach to water loss several years ago. Some of the phases include annual water balance, loss profiling and uncertainty, cost-benefit & targets, and intervention.

As an example of a supply-side strategy, John highlighted the City of Orangeburg which has two ASR wells and an interconnection with Lake Marion Regional Water System. Both are good examples of supply side strategies that enhance water resiliency.

John noted that Walther Farms in the Edisto basin has installed groundwater wells to supply 20 percent of their peak demands (an example of conjunctive use) and have done water audit/sprinkler head retrofits, eliminated end spray guns, developed a cover cropping program, and use dammer dikers for their potato crops which help focus water to where it's needed, thus minimizing water use.

John also highlighted Dominion Energy's Cope Station as an example of conjunctive use. The facility can (or will soon be able to) switch from meeting nearly 100 percent of its demand via surface water, to groundwater.

The RBC briefly discussed what water management strategies and best management practices are currently used in the Santee River basin. Charleston Water encourages low head fixtures, performs water loss audits following industry standard methodology, has smart metering (AMR and AMI) with telemetry within the system to help detect leaks. Mount Pleasant Waterworks (MPW) has a robust AMI system which allows customers to know when they may have consistent use or leaks. MPW also has two ASR wells with a third one being installed. They also practice conjunctive use and offer education and conservation outreach.

7.0 Conclusions and Upcoming Schedule

The next RBC meeting will be held on August 12th. CDM Smith will present model results, assuming they will be sufficiently complete at that point. There is a concern for agricultural voices not being present at most meetings so efforts will be made to loop-in these voices. The agenda for next meeting will be included prior to the meeting date. There will be model training offered after the next meeting.