

Minutes of the Broad River Basin Council

August 10, 2023

RBC Members Present: Ken Tuck, James Kilgo, Frank Eskridge, Jeff Walker, Angus Lafaye, Bryant Fleming, Jeff Lineberger, Amy Bresnahan, Daniel Hanks, Paul Pruitt, Mark Boland, Bill Stangler, Kristen Austin, Erika Hollis, John Alexander, Justin McGrady, Brison Taylor, & Karen Kustafik

RBC Members Absent: Jim Cook & Jason Wright

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

Total Present: 40

Ken Tuck, Broad River Basin (RBC) chair, called the meeting to order the August 10th, 2023, meeting of the Broad RBC. The RBC August 10th meeting review includes finalizing plan recommendations (chapter 9), finalizing the implementation plan (chapter 10), and discussing review comments on other draft chapters. The Broad RBC members unanimously approved the RBC June Meeting agenda and last meeting minutes and summary.

Motion to approve the meeting agenda: Bill Stangler, 1st and Frank Eskridge, 2nd. Unanimous approval.

Motion to approve the June meeting minutes and summary documents: Frank Eskridge, 1st and Angus Lafaye, 2nd. Unanimous approval

Public Comment Period – no comments

Agency Comment Period – Leigh Anne Monroe introduced a new member of her staff, Alex.

The housekeeping items: The review of the June RBC meeting discussion includes developing the planning process, technical and program, policy, legislative, and regulatory recommendations, working through 80% of the implementation plan, and developing strategies and actions for objectives 1 through 4.

Review Draft Chapter 9 and Finalize Recommendations:

John Boyer facilitated this session; part of the recommendation is the overarching policy, Narrative flow standard, and regulated water utility community (the regulatory process should

be determined by legislation and regulation developers but not generally be thrown out there so that it can be argued in court, consider ways to coordinate with the score on the planning).

Discussion:

Comment: Clean water Act – flow is important to water quality. Since 2013, EPA Region 4 has recommended water quantity standards ensure flow is inherently protected and that DHEC should adopt those standards. Since 2010, environmental and conservation interest groups have been trying to get these narrative flow standards adopted in SC.

Q: Would this be a state policy or a Broad-specific recommendation?

A: State-wide policy recommendation.

C: We should remain silent. The regulated community will be opposed and not interested in going down that road.

C: The EPA has traditionally dealt with water quality and it seems now they are trying to expand into water quantity which is a state purview. To clarify I am not against it, just not include in our plan.

C: It should be developed by (state) legislators and regulators.

C: I have the same opinion.

Q: Would the regulated community be happy with an empirical number standard?

A: Yes, science-based.

Q: Should we make a recommendation that DHEC determine the number?

C: It doesn't need additional emphasis.

Q: If DHEC has been working on it for 10 years, what does it hurt to make the recommendation?

C: Took it as not a priority.

C: Lack of enthusiasm.

C: We're not going to get consensus here.

C: Generally opposed to a vague recommendation.

C: Vague and ambiguous by definition.

C: It is already in there.

C: We don't say development of a numerical flow standard.

C: Not opposed to normal development of regulations.

C: For the Broad RBC, consensus won't be reached.

Q: Where do things stand? DHEC?

C: Drew has been working on water quality standards at DHEC.

Q: When is the next triennial review?

A: 2025

Q: Surface water permitting bill has a flow standard in it? How does this relate?

A: It didn't reach the Clean Water Act flow standard.

A: Come up with actual standards.

C: The EPA should not be commenting as it is not EPA's purview and it is a state issue and the EPA is encroaching.

C: Water quality is superseding quantity?

C: Water quantity and water quality are related – common sense.

C: Clean Water Act has the goal of maintaining quality – flow is a part of that. DHEC is designated that authority to implement the Clean Water Act and here's thoughts on how to do it better (EPA letter).

C: Won't come to a consensus so I guess we'll wait until 2025.

John Boyer: We gave voice to different opinions in the Edisto Plan – would this RBC be interested in mentioning both sides in the BRBC plan?

C: Could be some value to understand the issue by documenting the sides.

C: Puts it out there for people to see.

Motion: Make a motion for the BRBC to remain silent on this issue. 1st – Frank Eskridge and 2nd – Ken Tuck. Motion was originally tabled until later in the meeting to allow the most members to vote on the motion. The motion passed 11 yes votes to 6 no votes. The BRBC will remain silent on the narrative flow standards.

Finalize implementation Plan and Develop Progress Metrics:

Implementation plans are structured as follows: **(a) objectives** include addressing water shortages or other identified issues, informed by the RBC's recommended water management strategies and other plan recommendations. **(b) Schedule-** focuses on the first 5 years following

the River Basin Plan adoption and (c) **Budget**- budget needed to accomplish each objective and identified potential funding sources.

RBC Implementation Responsibilities include:

RBCs will meet once per year (at a minimum) to discuss implementation progress.

RBCs will submit biannual progress reports to SCDNR, which will:

- Summarize progress toward meeting each objective.
- Identify impediments and challenges.
- Document revisions to the implementation plan (and justification)

Discussion:

Page 94 wordsmithing

Withdrawal should be changed to withdraw.

9.3 recommendations:

C: Those are meaty recommendations if followed through. Allows DHEC to manage the resource. Recommending a law change and greater regulation which could change grandfathering and permit folks who currently aren't permitted. Seems like we are at consensus on this issue.

Q: Any other thoughts or wordsmithing?

John Boyer – SCOR resilience plan generally defers to this process for quantity issues especially for drought. Would the RBC like a speaker to discuss the resilience plan? Has everyone looked at it?

C: Might be better if RBCs work with SCOR on resilience planning as their plan evolves as there is a lot of overlap. It is important to coordinate with SCOR.

C: Is that a recommendation?

C: DES issue – clarification on the DES reference? DES is the new DHEC – Environmental Affairs and DNR Hydrology section. As of July 1, 2024 they'll be leading this effort.

John: We added a paragraph at the beginning of the document that next year DHEC will be DES.

Planning Section Recommendations: after the RBC continues to work with SCOR on resilience planning. *consensus – yes*

C: Should there be a liaison?

C: Find out overlap areas to work together. Every few years – presentations and provide updates.

C: Maybe based on necessity may be more direct connection between RBC and SCOR.

John: There could be synergy between quantity and flood control (dam/impairments as an example).

Implementation Plan, Objectives, Strategies & Actions:

Grace Houghton facilitated this session by highlighting the RBC's five objectives, which include:

- (a) Improve water use efficiency to conserve water resources,
- (b) optimize and argument sources of supply,
- (c) improve drought management,
- (d) effectively communicate RBC findings and recommendations and
- (f) improve technical understanding of water resource management issues.

Five-Year Implementation Plan: (Objective 5)

- Maintain and expand streamflow gages in the Basin.
- Research how changes in land use impact water resources quality and quantity
- Research financial impacts of increased sedimentation on reservoirs and water resources and communicate impacts to local government.
- The RBC should continue to consider ecological flow standards, including new and /or improved data, as it becomes available.
- The Broad should identify potential pinch points where current and projected low flows may lower the assimilative capacity of the streams.
- Consider incorporating future climate projections into modeling analyses (e.g., projected temperature, evapotranspiration, and precipitation trends) to better address potential supply-side changes in hydrology).
- The facilitator should create an online library of or a catalog of links to technical information that will enhance the RBC's technical understanding of water resources concepts and issues.

In other words, the first strategy is to approve the technical understanding or whatever issues, and the action plan is to communicate a strategy for speaking with USGS and other entities' funding stream gages (year 1-2) and RBC to support the search for additional funding sources as needed (year3-5). Invite RTI to educate the RBC on CWWMG's land conservation modeling (yr 1-2) and consider performing similar land conservation modeling to identify how land use changes may impact water resources (yrs 3-5). The RBC will develop an approach to address those water quality issues and concerns further, including developing a watershed plan under SCDHEC's watershed program (yrs 4-5). Facilitator to add resources based on new topics discussed in RBC meetings and requests of RBC members (yrs 1-5).

Discussion:

Ch 10 John Boyer – Finalizing Implementation Plan

Grace Houghton – Prioritize Objectives for Objective 5. Everyone comfortable with 1-4?

C: Objective 3 updating drought plans noting – update plan and send it to the SCDNR State Climatology Office.

Q: Is there a specific way to let the SCO know?

A: Send it to drought@dnr.sc.gov – State Climatology Office

C: The problem is they haven't sent it in to SCO – objective 3 pt B – should be shared with the SCO. *consensus – yes and John updated the document live*

Objective 5: Prioritizing

A

C: One recommendation is a meso-net (network) of weather stations.

C: Sensors for measuring land subsidence.

C: Groundwater and streamflow monitoring.

C: How to fund that?

C: We co-op on 6 and the USGS physically goes out there to calibrate which is labor intensive and the state has to pay most of it.

C: We participate with water quality monitoring but not flow in our partnership with USGS.

John Boyer: Is anyone familiar with the Green Infrastructure plan COGs are working on? DNR collaboration? – not the hydrology section anyway.

C: January of 2023 – GIS would be significant – DOT is involved to locate highways.

C: Not necessarily to incorporate but maybe to understand any overlap.

C: There's a lot of overlap, the question is if everyone is communicating with each other (no).

B

Land use change paper discussion.

C: So much forest, so much agriculture – we already talked about this topic?

C: There are other future land use papers out.

C: Forest futures report – lengthy analysis.

John Boyer: Should we be more specific in this objective? (B)

C: The Catawba-Wateree Water Management Group and the Water Research Foundation with RTI as the PI used a WaterFALL model which looked at land use change in the basin looking at conserving property to the tract-level. This would help to make the most out of money for land conservation to address future growth – make the most impact to protect water.

C: They've done it for the state, I believe.

C: Not to the level of the CWWMG study.

C: Ballpark estimate? For modeling effort?

C: About \$300k for the whole basin.

C: Michelle would be the one to talk to.

Is there any RBC interest in that recommendation?

C: Would be worthwhile to have Michelle speak to the RBC?

C: CWWMG had workshops for land use planners.

C: Name of the study? CWWMG's land conservation model.

Q: Was that a water quantity and water quality model?

C: Falls into ecosystem services and recreation uses as well.

C.

C: Case study – Saluda Lake – they dredged that lake – how did it work out? Silted back up within 3 years.

John Boyer: Benefit was gone in a short period of time. A lot of scour – rain events – maybe focus more on stream restoration.

C: She has the cost in cubic tons for erosion control.

C: B could inform C

John including horizon for water utilities – 30 year window – 2050- 2060 land use projections.

C: Could be out to 2070 to be consistent.

D.

John Boyer: Funding for fish study – flow ecology continuing?

C: DNR is funding for all of the basins initially.

C: May be incorporating land use.

E.

Vague actions – more meat on those?

C: Would inform future steps – DHEC watershed based plan.

C: Future is to pull everything together.

C: Those plans are funded at the HUC-12 level – targeted plans – several in this basin.

F.

Low Flow pinch point identifying

C: Captures – future problems for the next rendition of the plan.

G.

Climate projections – there's over 100 climate models – we usually ensemble the results.

C: Does it account for upstream impacts?

C: They're pretty big grids.

John Boyer: They can get pretty focused. We did it for Missouri.

C: Grids are about 100 sq km.

C: I'd like to look at past droughts using dendroclimatology and for the RBC to keep that option in consideration.

C: Interesting if there is data available – we should use it.

C: Paleoclimatology – dendrochronology is a tool.

C: Looking back has value but don't assume last 50 years will be like the next 50 years.

C: The extremes could be much more wet or dry.

H.

Library/catalogue

CDM will create the library initially.

Ranking A- H

A. 1

B. 2

C. 2

D. 3

E. 3

F. 4

G. 3

H. 1

C: G could also flow into/inform E or F

C: Sedimentation – inform local jurisdictions of why it is important. Economic Impact to the community and have those conversations leading to partnerships.

C: That's what it did in CWWMG – RTI work.

Q: The driver is funding?

A: Should be prioritized as the RBC is comfortable.

DNR: Prefer numeric ranking probably.

PROGRESS METRICS:

The progress metrics aim to assess the RBC's performance and the quality of actions taken by the RBCs. The framework proposes the development of progress metrics. Better still, progress is a benchmark used to monitor the success or failure of an action taken by an RBC. The proposed Progress Metrics include the following:

1. Improve water use efficiency to conserve water resources:

Metrics 1a: municipal and agricultural water conservation and efficiency strategies are considered, evaluated, and implemented.

Metric 1b: funding opportunities are identified and successfully used to implement supply augmentation strategies.

2. Optimize and augment sources of supply:

Metric 2a: strategies to optimize and augment sources of supply are implemented before they are needed

Metrics 2b: funding opportunities are identified and successfully used to implement supply augmentation strategies.

3. Improve drought management:

Metrics 3a: one hundred percent of public water suppliers' drought management plans are updated within the last 5 years and submitted to the SCO for review

4. Effectively communicate RBC findings and recommendations:

Metrics 4a: within 2 years, the RBC has presented to all County Councils that are within the Broad River Basin and requested their feedback and ideas for future study.

Metrics 4b: outreach is effective, prompting legislative actions, decisions, and funding that support implementation strategies and actions.

5. Improve technical understanding of water resource management issues:

Metrics 5a: USGS streamflow gages in the basin are maintained.

Metrics 5b: A presentation on the RTI study has been made to the RBC.

Metrics 5c: Research into financial impacts of sedimentation on reservoirs and water resources is completed. Results are communicated to local governments.

Metrics 5d: New data on ecological flow relationships is presented to the RBC and considered in subsequent RBC recommendations.

Metrics 5e: Potential pinch-points where low flows may lower the assimilative capacity of streams have been identified, considered, and incorporated in RBC recommendations.

Metrics 5f: Water quality issues and concerns in the basin are identified, and strategies to study approaches to address them are developed.

Metrics 5g: Potential climate change impacts on the Broad River Basin are assessed and presented to the RBC.

Metrics 5h: An online library of technical resources is available to and used by RBC members

Discussion:

Implementation plan prioritize

Objective 4 – communicating during the process is it a higher priority?

C: It is the life's blood of the whole thing.

1. High

2. Medium

3. High

4. High

5. Medium

C: 1 is important as is 3 – high.

C: Hard to say anything is a low priority or else why is it there?

1. Progress Metrics

C: Comes on heels of performance review process. We weren't necessarily in control of the results. We can share info – we can measure. Implementation is outside our influence. Did we do what we were supposed to do? There are some things we control. A lot are going to another jurisdiction.

C: Ultimately up to the customer base for utilities.

C: As a metric this works to see if it is working.

C: Residential accounts – outdoor water built-in – can make a difference in outdoor water use.

2A.

C: Several different strategies – wouldn't implement all of those – can we clarify?

C: When do we look at this – 5 years?

C: Implement them before they're needed.

A: Biannual progress reports to DNR – here's what we've done and are doing now.

3.

90% - what's appropriate?

C: 100% would be fantastic.

C: What are the major inhibitors to prevent updated drought plans?

C: No legislative requirement – lower priority.

C: Model (mewer) plans might help with consistency.

C: We are developing best practices guide (SCO) model ordinance and that's not too far off.

C: Not just putting a new date on it but need comprehensive updates.

C: If we had assistance or guidance it might help to make it technically helpful – technical assistance.

C: A water utility drought plan needs to have data – SCO wants to review.

C: Once we've updated the plan – what's the point of updating it every 3 – 5 years? Sometimes you have to go with numbers you have then revisit with new data.

C: Should go to 100% - may miss the underrepresented 10% if we hit 90%.

C: Private water suppliers are left out.

C: How many are there?

A: I don't have a firm number.

C: Does every public supplier have a plan even if it is old?

A: I think so, yes, DHEC checks every year – they are supposed to show them the plan and date of last update.

C: Public water suppliers – 65 are withdrawers – others purchase water – some could be a trailer park – withdrawers should be the goal. There is a disconnect between what's on the shelf and practice.

C: 100% - all?

C: How do we get them to do it?

C: RBC doesn't necessarily have to collect the information – tell DNR when you're moving in and out of your drought plan.

C: 3b isn't something we can manage.

C: Utilities are supposed to call SCO haven't been in drought lately. Back in the 2000s we did get calls.

C: Suggest we remove 3b.

4.

C: How many counties in the basin? 12. Part of this is a rollout action – presentation to county commissions or councils.

C: How we rolled it out for the CWWMG - we got letters of support.

C: Would be very useful – city councils, too.

Create/develop a standard presentation for RBC members to use to present. Boil down the final plan public meeting presentation at the end of the process.

C: How effective is it going to be? Got a long list of feedback and captured it into our action plan for CWWMG for iteration 2. Two-way communication.

Metric: 4a – RBC presented to local government – take water system representative with the person who can address local questions/concerns.

5.

Q: Just USGS gages?

C: Chane 5b to RTI presentation 5g to dendro-climate.

C: Some of these might have been intended for next iteration of the plan.

C: Formal ask for a meso-network for SC under 9.2. \$5 million to get installed plus 5 employees under DNR to maintain.

Boil down the ask and send it to John and the RBC for discussion and approval.

C: We'd like at least one for each county to start.

RBC and SCDNR Review Comments of Other Draft Plan Chapters

SCDNR Review Comments Chapters 1-4:

Chapter 1- Introduction: formatting a few typos and using the correct name of Columbia Canal on the photo

Chapter 2- Description of the Basin: Minor technical corrections, a few typos, formatting, grammatical suggestions, consistency between text and tables, correcting figure numbers, and using the correct name of Columbia Canal

Chapter 3- Water Resources of the Broad River Basin: Minor technical corrections, a few typos, formatting, correcting numbers, and updating hydropower water use table

Chapter 4- Current and Projected Water Demand: formatting and a few typos.

Duke Energy Review Comments Chapter 4: section 4.3.1 p.4-5- note that VC Summer is the only thermoelectric power plant in the South Carolina portion of the basin.

Section 4.3.1 p.45- change “Ninety-nine Island Lake” to “Ninety-nine Islands Reservoir”

However, the plan for the next meeting is to get your final comments on chapter 10. We will send out the complete drafts of the plan since all the chapters are together, which will be 25 or 30 pages at most. We aim to look at it using a common language and understand it all. Our next meeting will be on September 14th. We will review Chapter 10, complete Draft Plan, and Review Executive Summary. The October 19th (virtual meeting) will include Finalize Draft Plan and Executive Summary and Test of Consensus on the Draft Plan, and the November meeting will be the first Public meeting.

End of month on 5-6. Ch 9 will be sent out again. Ch 10 next 2 weeks. Executive Summary – week before next meeting.

September meeting – Spartanburg EOC. In-person.

October possible virtual only meeting. (October 19)

Looking to November for the first public meeting – draft plan.

Meeting Adjourned: 1:17 pm.

Minutes: Iffy Ogbekene and Tom Walker

Approved: September 14, 2023

RBC CHAT:

09:59:55 From Thomas Walker To Everyone:

we'll get started here in a few minutes

10:00:29 From Paul Pruitt To Everyone:

Thanks

10:03:34 From Kristen Austin To Everyone:



10:03:37 From Paul Pruitt To Everyone:

Will do, thanks

10:03:43 From b Fleming To Everyone:

Got It

10:04:07 From John Alexander To Everyone:



10:13:47 From Kristen Austin To Everyone:

Frank is cutting out- is this on my end?

10:14:10 From Joe Koon - SCDHEC To Everyone:

I'm hearing him fine

10:14:17 From Kristen Austin To Everyone:

Reacted to "I'm hearing him fine" with A small orange thumbs-up icon.

10:15:30 From Jeffery Allen (SC) To Everyone:

Audio is a little rough - struggling a bit to pick up everything being said.

10:15:59 From b Fleming To Everyone:

Hearing it good on my end

10:27:42 From Kristen Austin To Everyone:

I agree with Daniel. There is enough of division that both sides need to be documented and heard.

10:29:04 From b Fleming To Everyone:

Vote remain Silent

10:29:10 From Kristen Austin To Everyone:

Disagree with the motion.

10:29:15 From John Alexander To Everyone:

Table

10:29:24 From Paul Pruitt To Everyone:

I am on


10:29:27 From Brison Taylor To Everyone:

table


10:29:41 From Thomas Walker To Everyone:

we are tabling it for now

10:29:47 From Kristen Austin To Everyone:

Reacted to "we are tabling it fo..." with 

10:29:51 From John Alexander To Everyone:

Reacted to "we are tabling it fo..." with 

10:41:29 From Thomas Walker To Everyone:

5 min break - until 1046

10:49:25 From Thomas Walker To Everyone:

should restart in a sec - getting everyone back in

11:47:39 From b Fleming To Everyone:

Yes

11:48:30 From John Alexander To Everyone:

Yes

11:48:49 From Thomas Walker To Everyone:

thank you

12:02:21 From Thomas Walker To Everyone:

getting lunch - be back in 15 mins

12:03:18 From Paul Pruitt To Everyone:

I need to jump off for another commitment.

12:35:00 From John Alexander To Everyone:

I have to leave as well for some other commitments. Thanks

12:35:11 From Thomas Walker To Everyone:

ok thanks

12:50:13 From b Fleming To Everyone:

I have to get to another meeting at 1:00 so will be leaving in a minute

12:50:29 From Thomas Walker To Everyone:

understood thanks for sticking with us

13:18:28 From Thomas Walker To Everyone:

meeting adjourned