

Broad River Basin Council

March 9, 2023, Meeting Minutes

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

RBC Members Absent: Jeff Lineberger (Phil Fragapane, alternate, present), John Alexander, & Jason Wright

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

Total Present: 40

1. Call the Meeting to Order (Ken Tuck, RBC Chair) 9:00–9:10
 - a. Review of Meeting Objectives
 - b. Approval of Agenda
 - Motion to approve – Bill Stangler - 1st, 2nd – Erika Hollis. Unanimous approval.
 - c. Approval of February 9th Minutes and Summary
 - Motion – Bill Stangler – 1st, 2nd – Angus Lafaye. Unanimous approval.
 - d. Housekeeping Items
 - 2 resignations from the BRBC (Chip Few and Steve Hilbert)
 - Couple of guests – Cory Cox from Gaffney & Alexis from DNR to help with planning process.

2. Public Comment (John Boyer) 9:10–9:15
 - a. Public Comment Period
 - None
 - b. Agency Comment Period
 - None

3. February RBC Meeting Review (John Boyer)
 - Provided updates on reservoir models
 - Review of progress metrics - receiving feedback

4. Review of SWAM Model Updates 9:30–9:45
(John Boyer)
 - Model update- added North Tyger reservoir with capacity of 346 MG
 - For now we are not going to set any conditions
 - Review of definitions
 - Looking at scenic river stretch as reach of interest
 - Comparison to minimum instream flows
 - Look at a few other ecological areas for nodes

Discussion:

- Should we be concerned with any reaches with high sediment which may create a risk to species?
- Also in terms of reach of interest maybe check in with DNR fisheries to see if any reaches with species at risk
- Parking Lot: Something to flag for future analysis for 7Q10 for wastewater folks and higher flows

5. Safe Yield Results for Additional Reservoirs (Kirk Westphal, CDM Smith)

9:45–10:05

- Overview of concepts and purpose, define safe yield, reservoir balance, and demand assumptions (conservative - high demand 2070)
- Purpose- compare water availability in reservoirs to potential extreme future conditions
- Overview of safe yield for Gaffney
- Overview Safe yield for SJWD
 - 2008 seems to be the year we see the most stress on these reservoirs for SJWD
- Overview of safe yield for Greer
 - Recommend reduces shortages in reservoirs - Operational Rule to use to prevent unbalanced drawdown - could be recommendation from RBC
 - Do we know if they have any guidelines in place? Have not had to deal with this before but realize they might need to consider it
- Overview of safe yield for Spartanburg
- Comment: A lot of utilities will have a 30 year plan in place looking into the future
- Water quality issues during drought, as well
- Question: is the 2008 drought that we need to be looking at or is there some other record we need to consider? Yes, a lot of utilities are looking into other things like tree ring analysis to consider worse droughts in the past but

hard to get clear data. Hope Mizzell at SC Climatology office has a wealth of knowledge on this subject.

- Discussion of creating preemptive rules for extreme drought/dry conditions

Break

10:05–
10:20

6. Reduction in Water Supply from Sedimentation and Increased Evaporation (Kirk Westphal)

10:20–
11:00

- 2070 sedimentation analysis overview at the various reservoirs discussed as part of this planning basin
- Gaffney, see anything that surprises you? I will say over the last 5 years it seems like the amount of sedimentation has increased
- Land use change is another big factor
- This is just sedimentation in reservoirs? Yes
- Potential recommendation- governments and other entities work to reduce sedimentation in reservoirs to maintain capacity and to start identifying the sources.
- How much influence do water utility folks have on local government?
 - We serve the same public so it would be nice to have a little more collaboration
- One other risk factor we were asked to look at is sensitivity to evaporation from reservoirs – just water on the surface
 - Impacts to streamflow were fairly small
 - Comment from Alex: Seems that the source of sediment is actually already in the river and gets mobilized with more rainfall
 - We could make recommendations to pursue projects like streambank stabilization/restoration
 - Regulatory, permitting, and BMPs as additional talking points

7. Supply-Side Water Management Strategies for Gaffney (Kirk Westphal)

11:00–
11:30

- Looked at additional storage by increased dam height
- Looked at off line quarry as a reservoir
- Do the storage numbers surprise you ?

- Not really sure about the quarry maybe size and shape impacts storage
- How far do we want to take the analysis? We just looked at Gaffney
 - Maybe look more at interconnections and regional assistance
 - i.e. a (modeled) connection from Spartanburg to Gaffney
- Question: strategy to look is to pull from other river downstream where there seems to be plenty of water below Buffalo Creek.
- Is it worth looking at what threshold is needed through FERC license (FERC threshold analysis) – yes

8. Next Steps for Evaluating and Selecting Water Management Strategies (John Boyer) 11:30–
11:45

- Overview of decision making process for water management strategies
- Overview of example water conservation and efficiency strategies and supply side strategies
- Have DNR be on the lookout for potential to create and strategically place reservoirs (Challenges: EIA, land purchase, relocation, and distribution) – Model shortages (and add them) and use that to see what kind of reservoir would be needed + 10%. Example: A past potential Union County reservoir (350 acres)
- Values discussion and potential of 3rd party water certification recommendation for other water users (water utilities already have a similar version currently)

9. Drought Response Initiatives and Recommendations (over Lunch) 11:45-
12:45 (John Boyer and Kirk Westphal)

- Overview of the drought management areas and people involved
- Overview of RBC role for drought management support
- Climate office continually watches things to track droughts – updates weekly
- Discrepancy between regional drought condition and impacts on different storage areas
- Are there other drought management groups?
 - There are some management groups but none that apply in the Broad Basin
- RBC to provide feedback on drought response where necessary

- Q: Who all has to have a drought management plan? If utilities already implementing drought management strategy why have another? A: This also includes other large agricultural users and utilities that need to be pulled into it. Only public water suppliers have to have one
- Local level water suppliers are the only ones that need a drought management plan
- Are there water audits? We talk about this – there are some organizations that do this for water utilities
- Is there something you can get recognition from like AWWA that says we are drought prepared?
 - Yeah the EPA mandated risk and resiliency planning that accounted for drought and other things – using this to inform planning activities
- Did all public water suppliers agree to write their drought management plans with the same drought triggers?
 - Not sure about individual drought plans
- Does anyone see a need for comprehensive drought strategy?
 - Are there a lot of scenarios in plans where others are pulling from someone else's reservoirs? Everyone pretty much has their own
 - Really no need to put another layer since the drought plans are already in place
- Recommendation would really be to update drought plans
- There is value in people coming together to write plans so there is consistency especially when dealing with media
- Drought response recommendation examples
 - Water utilities update and review drought plans every 3-5 years
 - I would say every 5 years
 - Water utilities coordinate their drought response actions and messaging
- Water utilities in Basin establish drought surcharges on water use during moderate, extreme, and or sever drought conditions. Discussion filtered out -
 1. Remove establish and replace with consider and
 2. Removing surcharges during moderate drought conditions focusing on extreme or severe conditions
- Up to RBC chair and Vice Chair to help communication and get input from RBC to share – any input?
 - Anything to add? None heard

10. Upcoming Meeting Schedule and Topics
1:00 (John Boyer)

12:45–

- Upcoming meeting in April we will look at feasibility of water management strategies, begin to develop implementation plan, finalize drought response initiatives
- May – finalize selection and prioritize strategies, begin to develop plan recommendations, review chapters 1,2,3,4

- Recommendation to move more meeting to the lower part of the basin

Minutes: Kaleigh Sims and Tom Walker

Approved: 4/13/23

RBC Chat:

09:07:33 From Thomas Walker to Everyone:

public comment

09:07:37 From Thomas Walker to Everyone:

or agency comment

09:19:22 From Kristen Austin to Everyone:

From my perspective, I agree with these metrics! I also agree about #6- very clear and efficient! +1 what was just said.

09:19:25 From Karen Swank Kustafik to Everyone:

Reacted to "From my perspective,..." with 👍

09:21:12 From Thomas Walker to Everyone:

thank you kristen!

09:24:40 From Kristen Austin to Everyone:

Reacted to "thank you kristen!" with 👍

09:25:34 From Paul Pruitt to Everyone:

I am comfortable not adding that complexity.

09:26:27 From Thomas Walker to Everyone:

thanks paul, will note this for john

09:26:45 From Paul Pruitt to Everyone:

Thank You.

09:36:24 From Kristen Austin to Everyone:

BRB

09:41:14 From Kristen Austin to Everyone:

Back

09:41:35 From Thomas Walker to Everyone:

we are discussing reaches of interest. any comments on that?

09:41:53 From Thomas Walker to Everyone:

primarily discussing the scenic river stretch

09:59:48 From Karen Swank Kustafik to Everyone:

That makes sense- would this 44 cfs be a potential "condition" we recommend, then?

10:01:02 From Thomas Walker to Everyone:

i'll ask in a second, thanks karen

10:01:51 From Karen Swank Kustafik to Everyone:

thanks.

10:02:34 From Thomas Walker to Everyone:

thanks karen good question

10:20:08 From Thomas Walker to Everyone:

reconvene at 1030. 11 min break

10:30:34 From Kristen Austin to Everyone:

I'm going to switch to my phone now.

10:47:13 From Alex Pellett to Everyone:

DNR studies by Kerry Castle et al. indicate that a large majority of sediment in the Broad basin is from bank erosion of legacy sediment deposited in the floodplain 50-100 years ago. Development will increase peak flows, and thereby increase mobilization of the legacy

sediment, but the source of the sediment is mostly the stream itself.

10:48:16 From Thomas Walker to Everyone:

thanks alex, do you want me to stop kirk to let you chime in or just have it in the minutes?

10:49:20 From Alex Pellett to Everyone:

In a few minutes is fine. Or just paraphrase my comment. If they have questions then I can chime in, but if someone doesn't understand what I'm saying, I bet at least one person present will understand the point.

10:50:07 From Thomas Walker to Everyone:

you'll say it better so i'll find a good stopping point to interject

10:50:20 From Alex Pellett to Everyone:

ok, Ill see if I can pull up the study real quick...

10:50:58 From Thomas Walker to Everyone:

ok let me know when youre ready

10:52:16 From Alex Pellett to Everyone:

ready

11:32:18 From Paul Pruitt to Everyone:

would like to get it done...

11:32:54 From Thomas Walker to Everyone:

break until 1140 to grab lunch here

11:33:47 From Kristen Austin to Everyone:

I need to sign off at this point. Thank you, this has been so helpful to clarify the next step in the process. Looking forward to it.

11:34:35 From Thomas Walker to Everyone:

TY kristen

12:57:06 From Karen Swank Kustafik to Everyone:

I can check availability for Earlewood Park's banquet room. Glad to help

12:57:17 From Karen Swank Kustafik to Everyone:

And we can look at EdVenture as well

12:58:12 From Thomas Walker to Everyone:

thank you karen

12:58:31 From Thomas Walker to Everyone:

meeting adjourned

