June 9th, 2022 9:00 AM – 1:00 PM Meeting No. 3 Spartanburg Community College Tyger River Campus

1. Call the Meeting to Order (John Boyer, Facilitator)

Broad River Basin Council

June 9, 2022, Meeting Minutes

RBC Members Present: Paul Pruitt, Jim Cook, Angus Lafaye, Ken Tuck, Frank Eskridge, Jeff Walker, Erika Hollis, Jeff Lineberger, Jason Wright, Mark Boland, Bryant Fleming, Steve Hilbert, Daniel Hanks, Brison Taylor, Justin McGrady, John Alexander, Karen Swank Kustafik, Amy Bresnahan, Kristen Austin & Chip Few

RBC Members Absent: Raymond Sligh, Bill Stangler (Steve Dekozlowski, alternate, present), & James Kilgo (Devin Orr, alternate, present)

Planning Team Present: John Boyer, Scott Harder, Tom Walker, Leigh Anne Monroe, Jeff Allen, Kaleigh Sims, Chikezie Isiguzo, Joe Gellici, & Andy Wachob

9:00-9:05

Total present: 52

John call meeting to order at 9:03am				
	a.	 Review of Meeting Objectives Review of what RBC will go over for this meeting 		
	b.	Approval of Agenda		
	i. Motion to approve- Steve Hilbert 1 st , Erika Hollis 2 nd – unanimous approval			
	c. Approval of April 14 th Minutes and Summary			
		i. Motion to approve – Paul Pruitt 1 st , seconded – unanimous app	roval	
	d.	Housekeeping Items		
		i. Any other items to mention? None		
2.	Public	Comment (John Boyer)	9:05–9:10	
	a. Public Comment Period ¹			
	 Any comments? Steve (online), sitting in for Bill S. we are anxious to hear a the low flow report so sitting in for that 		us to hear about	
	b.	Agency Comment Period		
		i. Any comments? None		
3.	Low Flo	ow Statistics in the Broad River Basin (Toby Feaster, USGS)	9:10–9:40	
Toby F presenting				

- USGS been computing low flow stats since the 1960's
- Recommend updating every 10 years
- Can search low flow stats for SC basins at USGS
- 2022 entered agreement with DHEC and DNR to update low flow stats at USGS stations and develop regression equations that can be used to estimate low flow and mean annual flow stats at ungauged locations (using template from Alabama)
- Providing overview of how 7Q10 is computed
- Question: aware of any tree ring record work?
 - Yes, more so out in the west, but here have been some done looking at annual lows in the Carolinas
- Question: how many stations or what percent have over 50 years of data
 - Can't tell you the specific stations, we are wrapping up frequency study but would have to go back to look at the data to see how that breaks out
- Question: Increase demand on water from streams, is the 7Q10 enough to protect human and natural resource uses?
 - Some would say we should be looking at other flow stats to be sure we are protecting all uses, but don't have an answer for that. 7Q10 has been part of system for so long it might take a long time to change
- Question: short cycle where we see weather changes, is there anything that could change here that could lengthen cycle to decades?
 - Not sure, but going back to tree rings in Colorado river they have seen that it can happen
- Comment: on the topic of tree rings, but also natural pattern of wild fires with trees, we have changed the natural fire in the ecosystem
- Quest: how much effect on groundwater when fire happens?
 - Coweeta hydrologic lab (NC) has been conducting studies on this and showing that forest composition is shifting so as fires more frequent you are removing trees that suck up as much water so you have trees not taking up as much water so you are getting more quantity. Also looking at how fire impacts water quality, and doesn't show as much impact for quality maybe some improvements
- 4. North Carolina Water Supply Planning (Linwood Peele, NCDEQ) 9:40–10:10

Presenting overview of North Carolina Water Planning

- NC does not have state wide water use permitting program, it is a riparian state. Limited regional permitting, only state wide water use registration (local water supply plan and water withdrawal registration)
- Water supply plans do have to have drought planning
- Overview of broad river basin (19 water systems)
- Overview of challenges, lack of ability of plan and manage all water uses, difficult to quantify availability of water supply, coordination between water users
- Question: any improvement in aquifer?
 - Not total rebound but we have seen improvement
- Question: when talking about largest demands to Broad do you not have data for Ag which is why it doesn't populate for demand?
 - Yes, that is true
- Question: had a table with public water supply that had population projection and demand, how is supply determined?

- Supply (12 hr supply for wells, for SW its low flow study, if reservoir its 20 year safe yield or 50 year safe yield, if Duke then it's a contract from Duke)
- Question: when we do SW modeling, we have 2 flow points coming from NC looking 50 years into the future, if we go to 19 water supply plans and look at their projections does the state consider those reasonable projection?
 - Yes, we have to review them and if it's not reasonable to us then we tell them to go back and reevaluate ... once approved by the state it is reliable, most plans focus on surface water

Break 10:27 for 11 min

5. Broad Basin Climatology (Elliot Wickham)

10:10–10:35

Presentation on climate in SC

- Overview of climate office responsibilities
- Climate stations within the Broad basin
- Stations across state help track climate trends
- Overview of areas impacted by recent extreme storms and types of storms
- Question: on slide about temperature trends, said temp is increasing 1 degree per year?
 No 1 degree over the 100 years not per year
- Question: does graph suggest it will get warmer than 1 degree?
 - Yes, relationship is that emissions could have an impact on temperature
- Question: what are factors in models, clearly emissions but what else?
 - I am not going to answer that, but I will do my homework and share with you what goes into it
- 6. SC Drought Response Act (Elliot Wickham and/or Hope Mizzell) 10:50–11:20

Elliot covering for Hope

- Notable droughts throughout the years overview of dates
- Drought monitoring and response (Act and supporting regulations)
- Monitor drought through a blended approach not just rainfall
- Overview of state emergency plans
- Vacancies in drought management areas if you want to serve
- Can find plans on file at the SC State Climate Office website
- Question: how do you interface with SC flood water commission?
 - I can tell you that down the hall is the food hazard mitigation group we do communicate but we have not coordinated a lot
- Question: do you know if the drought response committee has ever required mandatory drought restrictions?
 - I will have to ask another person about that
- Comment: John One thing we have to talk about in the plan is drought response where we will summarize existing plans in the basin and what they use to trigger conservation levels and reductions and if they have any alternative water supply agreement. Mostly for information purposes but need people to look over and confirm things are right. Also, we will ask the council to consider basin wide drought plan, is there a need for a coordinated plan, something to think about.

7. Vision and Goals Development and Working Lunch (John Boyer)

- Overview of identified basin priorities
- So far, a few votes for 1 and 4, people like the education component of 4
- Suggestion: stay high level with vision and then drill down as we go
- Suggestion: do not like balance by itself maybe more of a statement about fairness because its always changing and priorities shift, maybe add dynamic system. Also add improving somewhere
- General consensus for 1st vision statement
 - Motion to adopt:
 - Broad RBC Vision Statement: Empowered stakeholders taking coordinated actions to conserve and enhance the resilience of the Broad River Basin to provide water resources for quality of life, while accounting for the ecological integrity of our shared water resources.
 - First, Justin McGrady and Second, Steve Hilbert
 - No opposed all in favor unanimous
- Goals:
 - No one opposed to the first two goals
 - o Add in legislative recommendations at some point
 - Question: has anyone done a study on where you can place new reservoirs to increase capacity ?
 - Individual water utilities do look at the feasibility of adding another reservoir
 - You will probably see more regional collaboration rather than adding reservoir
 - Comment: a lot of major reservoirs were all built before federal legislation put in place so there is a lot of bureaucratic loops now for any new major reservoir to take place
 - So, water quality is out of scope? Not completely but we will not be doing any analysis but might work it in as a future goal or analysis
 - Add new goal for legislative recommendations
 - Add something about preserving and protecting eco needs
 - Got 3 goals, education and sound science data driven and legislative
 - Make sure we keep the 4 sub points for later potential strategies
 - Broad RBC goals:

 Enhance the understanding of regional water issues and the need for support of policies and behaviors to protect resources through promotion and education.
 Use sound science and data driven practice to support collaboration for all entities

to effectively and efficiently manage the basin.

3. Provide policy and legislative recommendations.

- o Motion for the goals: First, Erika Hollis and Second, Kristen Austin
- All in favor , no opposed unanimous
- 8. Selection of RBC Chair and Vice Chair
- Chair: Ken Tuck (15 votes) and Jeff Lineberger (6 votes)
 - o Ken T is elected chair
 - Votes for Ken: Jim C, Angus L, Ken T, Frank E, Erika H, Jeff L, Jason W, Mark B, Steve H, Daniel H, Brison T, Karen K, Amy B, Kristen A & Chip F
 - o Votes for Jeff: Justin M, Jeff W, Paul P, Bryant F, Devin O & John A
- Vice Chair: Jeff Lineberger (10 votes) and Daniel Hanks (11 votes)
 - o Daniel H is elected vice chair

12:20-12:50

9. Upcoming Meeting Schedule and Topics (John Boyer)

- Next meeting, July 14th at Presbyterian College (Jacobs Hall)
 - Water legislation, current water use, demand method, and Broad basin reservoirs and projects

Minutes: Kaleigh Sims and Tom Walker

Approved: 7/14/22

Broad RBC Chat:

09:01:04 From Thomas Walker to Everyone:

waiting for a few more people to trickle in before we get started

09:06:39 From Thomas Walker to Everyone:

public comment period

09:06:47 From Thomas Walker to Everyone:

raise hand or comment

09:07:25 From Thomas Walker to Everyone:

agency comment period

09:35:07 From Thomas Walker to Everyone:

any questions for Toby?

10:17:16 From Thomas Walker to Everyone:

questions for Linwood

10:17:18 From Thomas Walker to Everyone:

?

10:27:43 From Thomas Walker to Everyone:

11 min break

11:02:19 From Thomas Walker to Everyone:

climate questions?

11:39:22 From Thomas Walker to Everyone:

drought questions?

11:52:08 From Thomas Walker to Everyone:

break to grab lunch.

12:20:58 From Brison Taylor to Everyone:

2nd

12:35:16 From Thomas Walker to Everyone:

thoughts on 4?

12:35:20 From Thomas Walker to Everyone:

include or not include

12:35:29 From Brison Taylor to Everyone:

keep 4

12:35:50 From Brison Taylor to Everyone:

agreed, 4 supports management of the basin

12:58:09 From Thomas Walker to Everyone:

votes for jeff lineberger

12:58:12 From Thomas Walker to Everyone:

as chair

12:58:12 From John Alexander to Everyone:

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12:58:47 From Brison Taylor to Everyone:

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12:59:03 From Brison Taylor to Everyone:

for ken

13:00:13 From John Alexander to Everyone:

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13:01:24 From Thomas Walker to Everyone:

Daniel as vc

13:01:29 From Thomas Walker to Everyone:

vote

13:01:45 From Brison Taylor to Everyone:

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13:02:00 From John Alexander to Everyone:

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13:06:59 From Thomas Walker to Everyone:

thanks john and brison and all