

Minutes of the Edisto RBC Meeting

Wednesday, September 9, 2020

9:00 a.m. until 11:08 a.m.

Meeting was held virtually via Zoom Meeting Application

RBC Members Present: Alex Tolbert, Mark Aakhus, Laura Bagwell, John Bass, Kirk Bell, David Bishop, Joel Duke, Johny Haralson, JJ Jowers, Alta Mae Marvin, Eric Odom, Hank Stallworth, Jason Thompson, Jeremy Walther, Landrum Weathers.

RBC Members Excused: Richard Hall absent - Amanda Sievers (alternate) present, Charles Shugart absent, Natalie Tarpein absent, Mike Mosley absent - Brandon Stutts (alternate) present, Hugo Krispyn absent, Jerry Waters absent - Leland Reynolds (alternate) present, Trey McMillan absent - Tres Dausey (alternate) present.

Planning Team Present: Jeff Allen, Scott Harder, John Boyer, Rob Devlin, Alex Butler, Tom Walker, Ken Rentiers, Joe Gellici, Chikezie Isiguzo, Vincent Leon Guerrero.

Total Present: 81

1. Agenda Item: Call Meeting to Order (John Boyer, Facilitator)

John called the meeting to order at 9:00 AM. He reminded everyone the meeting is being recorded and called on RBC members to confirm attendance. The meeting proceeded when a quorum was confirmed.

- a. Review of Meeting Objectives
John reviewed the meeting objectives from the Agenda.
- b. Approval of Agenda
Meeting Agenda was approved with 11 “yes” and 0 “no” votes.
- c. Approval of August 19th Minutes and Summary
Minutes were distributed to the council prior to the meeting. Agenda was approved unanimously.

John reminded the members to sign-in to the meeting with their names to aid recognition and effective meeting management. He added that two attendees from CDM Smith, Murray Dodd and Jenny Bywater, joined him for the meeting.

2. Agenda Item: Public Comment

John asked members for public comments. No public comments were submitted. No public comments were received in writing after the last meeting, August 19, 2020.

3. Agenda Item: Watershed Based Development Grant Opportunity

John proceeded to introduce Amanda Ley, a Watershed Manager with DHEC, who informed those in attendance of an upcoming watershed-based grant opportunity on water quality. She invited members that may be interested in more information on the opportunities to contact her.

4. Agenda Item: Basin Hydrology and Monitoring (Scott Harder)

Scott Harder presented an overview of the hydrology and hydrogeology. He covered historical rainfall trends and patterns, surface water monitoring network, and monthly streamflow statistics. He explained the flow direction curve and the new USGS monitoring sites. He also covered the Edisto Surface Water Model (SWAM) a simplified water allocation model updated in 2017. He explained to the Council that SWAM is a decision making tool to assess surface water availability and water management strategies, supporting the development of river basin plans.

Scott covered groundwater monitoring and directed members to ground water data viewer on the DNR site. He also mentioned the groundwater model developed by USGS, a decision-making tool used to assess groundwater availability and management, noting that the final report on the model is still under review. Scott concluded with a description of the role of technical advisory committees in providing technical support to the RBC on technical issues. He announced that the Surface water technical advisory committee has been formed while the Groundwater technical assessment advisory committee is still in place till a substantive Groundwater technical advisory committee is instituted.

QUESTIONS

Hank Stallworth: Asked to know if using groundwater out of the recharge area affects the whole basin.

Responding, Scott Harder noted that though the scenario is possible there is no evidence that there is an effect on the basin

5. Agenda Item: Connection between Surface Water and Groundwater (Bruce Campbell)

Bruce Campbell from the USGS presented an overview of groundwater and surface water emphasizing that the two are interlinked. He invited the members to refer to publications and resources by the USGS. He presented a description of the water cycle and the water table. Bruce covered gaining and losing streams interact with groundwater in all types of landscapes. Highlighting the fact that streams can gain water from the flow of groundwater through the stream bed. He explained the groundwater component of the streamflow and how the hydrograph and baseflow separation contribute to understanding the groundwater component.

Bruce presented the Edisto river gauge and the river's calculated ground water baseflows. He explained to the members groundwater model simulated water budgets, groundwater recharge model recalibrated and applied to scenarios, USGS soil water balance model and groundwater model area. He noted the water inputs and water outputs that are components of groundwater budgets. He cautioned that groundwater models are not surface water models.

In conclusion, Bruce noted that groundwater is the primary source of water for the Edisto river basin and invited members to contact him if anyone needed any reports (bcampel@usgs.gov; 803 750 6161).

QUESTIONS

Question: Is the recharge rate based on precipitation or does it take into account development with recharge area that would limit actual infiltration or rainfall?

Responding, Bruce that it does consider development within the recharge area
The meeting paused for a brief break.(4 minutes)

6. Low Flow Characteristics (Toby Feaster - USGS)

Toby presented to members the flow characterization of South Carolina streams. He directed members to <https://pubs.er.usgs.gov/> for publications of low-flow statistics noting that the last survey was conducted in 2008 and the ideal cycle for state-wide update is 10years. He went into details describing the low-flow characterization – 7Q10 model. Using the model, Toby presented 1895 – 2019 long-term annual statewide low precipitation. He summarized with an admonition to members of the RBC on the importance of historical data stating that “the reason we have long term records is because we have short term memories.” Toby rounded up with an invitation to members to send him emails (tfeaster@usgs.gov) on any issues discussed in the presentation.

QUESTIONS

Question: For 7Q10, will 7Q10 decrease if water use increases? Or does it factor in what stream flow would be without water withdrawals?

Toby responded that the model does not account for water withdrawals but accounts for stream flows measured at the gauge.

Jason Thompson: People are concerned about the low flow periods, what is your general thought on the high correlation between the low flow events in some sites over the eight-year period as presented.

Toby responded that the analysis did not consider the kind of relations that would assess correlation.

7. Select Process Metrics (John Boyer)

John explained the need for process and progress metrics. Progress metrics are benchmarks used to monitor the success or failure of actions taken by the RBC. Process metrics are the benchmarks used to monitor the success or failure of the processes which led to the RBC actions. He noted the importance of the RBC to track its progress and process through clearly defined goals. He presented to the members of the RBC the underlisted process metrics for consideration after stating that progress metrics would be scheduled for consideration in due course. The first four process metrics were suggested in the Planning framework, while John suggested the other eight process metrics.

Votes in favor of suggested metrics -12, votes opposed - 0

- i. The process to select RBC members is well documented, transparent, and reflect broad based outreach.
- ii. RBCs develop a River Based Plan within two years of RBC formation.
- iii. RBC meetings adhere to timelines.
- iv. River Basin Plans are actionable, logical, and address or prevent challenges with a level of detail to be cost-accountable.

Votes in favor of v. - 12, votes opposed – 0

- v. Information used and generated during the planning process is shared openly, publicly and is easily accessible.

Votes in favor of vi. – 11, votes opposed - 0

- vi. RBC meeting agendas are focused and promote efficient and productive meeting.

Votes in favor of vii. – 12, votes opposed – 0

- vii. RBC members are able to effectively consider, digest, and understand technical information through presentations, discussions, and self-study.

Votes in favor of viii. – 11, votes opposed – 0

- viii. Decisions are made using best available scientific technical, legal, or other objective criteria

Votes in favor of ix. – 12, votes opposed - 0

- ix. Controversial issues are discussed openly in a respectful manner and multiple options for resolution are considered

Votes in favor of x. – 12, votes opposed - 0

- x. Information is presented in an unbiased manner.

Votes in favor of xi. – 13, votes opposed - 0

- xi. RBC members are provided equal opportunity to be heard and express their interests, ideas and concerns.

Votes in favor of xii. – 13, votes opposed – 0

- xii. The use and outcomes of models and other tools to assess water availability and evaluate strategies are appropriately documented

Jason Thompson: Another process metric to consider is one that is related to meeting attendance.

The members of the RBC noted the processes for consideration and were invited to comment on and select suitable metrics

QUESTIONS AND COMMENTS

Chrissa White: How do you measure the first metric?

John answered that the first metric can be measured by the documentations and the process the DNR follows in selecting the RBC members.

Landrum Weathers and Cliff Duffie: The PPAC's role in the first metric has to be mentioned.

Responding Tom walker noted that the PPAC plays oversight role and helps in the process of selecting RBC members.

Mark Aakhus: Process metric 2 and 3 are regarding schedule and can be combined. Responding, John agreed with the proposal and invited members to review the processes in that light.

DECISION

The members of the RBC voted to adopt the process metrics as a base for further consideration by the RBC. John announced that the process metrics will be condensed and aligned to reflect suggestion and comments made by the members and distributed to members before the next meeting of the RBC.

Field Trip Ideas

John solicited for field trip ideas from members of the RBC.

- Hank suggested canoe trip to South Fork to see big irrigators.
- Jowers suggested Dominion Generating Station.
- Jeremy Walther offered to host a field trip to Walther Farms.
- John mentioned the possibility of going to the coast to the oyster farm sites and noted another suggestion to visit a water treatment facility.

8. Agenda Item: Meeting Conclusion

- John invited members to keep thinking about field trip ideas and process metrics
- Next meeting is September 30.
- John presented an overview if the agenda and invited members to share ideas and suggestions with the Planning team

Meeting was adjourned at 11:09 AM.

Minutes: Vincent Guerrero, Chikezie Isiguzo, and Tom Walker

Approved: September 30, 2020