

**Final Meeting Minutes  
Rivanna River Basin Commission**

October 18, 2007

6:00 pm

Thomas Jefferson Planning District Commission  
401 East Water Street, Charlottesville

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**Attendance**

***Rivanna River Basin Commission (Commission) Members***

***Present:***

Ms. Jeri Allen, Greene County Board of Supervisors

Dr. Paolo D'Odorico, Charlottesville Citizen

Mr. John Martin, Albemarle County Citizen

Mr. Marvin F. Moss, Fluvanna County Board of Supervisors

Mr. Robert Runkle, Culpeper Soil and Water Conservation District Board of Directors

Ms. Sally Thomas, Albemarle County Board of Supervisors

Mr. Andy Wilson, Fluvanna County Citizen

***Absent:***

Mr. Smith Coleman, Greene County Citizen

Mr. Mickey Cox, Greene County Board of Supervisors

Mr. Lindsay Dorrier, Albemarle County Board of Supervisors

Mr. John E. Easter II, Thomas Jefferson Soil and Water Conservation District Board of Directors

Ms. Kendra Hamilton, Charlottesville City Council

Mr. Kevin Lynch, Charlottesville City Council

Mr. Gene F. Ott, Fluvanna County Board of Supervisors

***Speaker***

Mr. Sam Austin, U.S. Geological Survey, Commission TAC Chair

**1. Call to Order**

The meeting was called to order at 6:10 pm by Ms. Thomas.

**2. Roll Call**

Attendance was taken.

**3. Determination of Quorum**

It was determined a quorum was present.

**4. Approval of the Agenda**

The agenda was approved.

**5. Comments from the Public**

There were no comments from the public.

**6. Approval of the Minutes of the Preceding Meeting**

Ms. Allen moved to approve the minutes, Mr. Moss seconded the motion, and the motion was approved unanimously.

**7. Report of the Chair**

Ms. Thomas informed the Commission that she and Mr. Moss recently attended the Chesapeake Bay Watershed Forum in Shepherdstown. She said that they received a lot of compliments about the work that we are doing in this community. She added that a lot of the attendees are working with communities that have no zoning and few if any environmental protection measures. She said that it was nice to hear that our community is doing good things. Mr. Moss added that this is a unique event that brings together people from all over the Chesapeake Bay watershed. He said it is very well done and very worthwhile, and suggested that a good expenditure of the Commission’s funds could be to send members of the Commission to this annual event. Ms. Thomas agreed that the Commission should think about sending some members next year.

**8. Report of the Fiscal Agent**

Ms. Alyson Sappington of the Thomas Jefferson Soil and Water Conservation District (TJSWCD) provided the fiscal agent report. She stated that the Commission’s funds are still in an account at The Nature Conservancy (TNC) pending legal review by TNC to authorize transfer of funds to TJSWCD.

Balance as of August 30, 2007	= 297,308.83
Interest Earned	= 248.17
<b>Balance as of September 30, 2007</b>	<b>= \$297,557.00</b>

Total Interest Earned to date = \$6,417.51 (Of that, \$742.65 was earned since July 1, 2007 (FY08). The monthly interest is just under \$250 (approximately 1% annual).

\$0 in donations received since July 1, 2007 (FY08). During FY07 (last fiscal year), about \$61,000 was received in donations from private individuals. (These donations have been pledged and are still coming in.)

Ms. Thomas suggested that the Commission consider sending letters of thanks to the people that have made donations to the Commission. Ms. Diane Frisbee of TNC said that she would look into how the Commission might go about sending letters of thanks to the donors and would report back at the next meeting.

**9. Reports of Committees**

Mr. Samuel Austin, the Chair of the Technical Advisory Committee (TAC), gave a summary of the October 15 TAC meeting. The focus of the TAC meeting was to discuss potential next steps for the TAC and the Commission, now that the Commission has identified altered hydrology as the threat to focus on. There were two main items discussed at the meeting: 1) field trips for the Commission and 2) next steps for the TAC.

The TAC discussed ideas for field trips Commission members might take to see firsthand a healthy stream, manifestations of altered hydrology, and management practices to address altered hydrology. They decided to further discuss field trip options over the next few months and will come back to the Commission early next year with a plan for the trips.

The TAC also discussed next steps the Commission should take to address the threat of altered hydrology. The TAC thinks that the first step should be to synthesize what is known about management practices to address altered hydrology. The TAC would like to produce a report for the Commission that compiles what is known about effectiveness, cost, and community acceptance of various practices. Once this information has been synthesized, the TAC will be able to identify gaps in their knowledge and determine which management practices need to be tested. The TAC discussed two ways of synthesizing what is known and preparing a summary report: 1) the TAC could form a sub-group that is charged with compiling information and preparing the report, or 2) the TAC could recommend that the Commission hire someone to conduct a literature review and prepare the report. The TAC decided that at their next meeting, they will begin to compile information on what they know about management practices. This should help them identify gaps in their knowledge and help them determine if it is necessary to hire someone to conduct a literature review and prepare the report.

The TAC also talked about perhaps working with a local development to install and test management practices in the field. Biscuit Run was discussed as a potential site for testing management practices. Mr. Moss asked what the process would be if the Commission were to work with Biscuit Run. Ms. Frisbee replied that if the Commission decided to approach the Biscuit Run developer (Hunter Craig), Mr. Schuyler could talk to him about establishing a formal relationship with the Commission to use the development as a feasibility study for testing management practices. Ms. Frisbee said that Mr. Schuyler has had some conversation with Mr. Craig already about rainwater harvesting and he appears to be interested in this. Ms. Thomas added that Biscuit Run has also proffered a stream gauging station. Dr. D'Odorico stated that the gauging station could be very useful and asked what would be tested at the gauge. He suggested the TAC come up with a list of things that should be sampled at the gauge. He also asked when the gauging station would be installed. Ms. Thomas replied that she wasn't sure of the specifics, but could check the proffers to find out. She also added that Mr. Craig is doing a big box development that she is not that excited about, and said that if they did rainwater harvesting at this site, she would be much happier with the project.

Ms. Allen asked if it was difficult and expensive to install a gauge. Dr. D'Odorico replied that rain gauges can be inexpensive (at most \$500), and suggested that perhaps the Commission could install gauges to measure rainfall on the development if the developer does the stream gauge. Having both rain gauges and a stream gauge would give a more complete picture of the hydrology of the site. Mr. Austin said that typical installation for a U.S.G.S. stream gauge is \$13,000, but this is for a very high quality gauge. He agreed that if we are able to install rain gauges and the stream gauge soon, it would be very helpful for the Commission's work. Mr. Moss asked if the TJSWCD had any money to contribute to something like this. Ms. Sappington replied that they do not.

Ms. Thomas said that she will have further conversations with Mr. Schuyler about what the Commission can do to provide extra encouragement to Biscuit Run or perhaps a material item such as a rain gauge. She said that since the full Commission won't be meeting for a few months, perhaps the members can communicate about this via email.

Mr. Austin reported that the TAC decided they should continue to meet monthly for the foreseeable future. He also mentioned a couple of other items that came up at the TAC meeting. One of these is the Rivanna TMDL. At the TAC meeting, Mr. John Murphy suggested the TAC discuss the TMDL and its relevance to the Commission's work. Several of the TAC members also serve as members of the TMDL Steering Committee. Mr. Murphy asked the TAC if they should be more involved in review of the TMDL. The TAC decided to request additional information on the TMDL process from DEQ and the consultant, and make that information available for all TAC members to review. After the TAC review, the TAC can discuss and decide whether or not the Commission should make a formal comment to DEQ.

Ms. Rochelle Garwood commented that since the TAC meeting, she asked DEQ and the TMDL consultant about getting the assumptions and calculations behind the handouts that have been given at TMDL Steering Committee meetings. DEQ replied that because the information presented was the results of a model, it was difficult to fulfill a request for all the "assumptions and calculations" without simply providing the model documentation and all the input files. DEQ also said that this information does not mean much to most people, unless they are modelers. DEQ suggested that the Commission review the information provided at the Steering Committee meetings and provide DEQ with specific questions. Ms. Garwood said she doesn't remember it being this difficult to get the underlying assumptions when they did the Moores Creek TMDL, but said that it appears we need to come up with a specific list of questions if we want to get some answers.

Ms. Thomas commented that she was at the TAC meeting and was surprised by some of the estimates the TMDL consultants are using in their modeling, and said that she feels it would be helpful to have more TAC oversight. Mr. Moss asked how important the TMDL was to the Commission's work. Ms. Sappington replied that she has lost faith in the TMDLs, for the types of issues being discussed, such as the estimates used. She said she has more faith in the data that groups like StreamWatch are collecting. Mr. Moss replied that if that's the case, perhaps the Commission shouldn't get involved. Ms. Sappington said that it is good to have a TMDL done because the TMDL gives us the opportunity to apply for funding to implement the TMDL. Ms. Allen added that Greene County knows how many cows there are in different parts of the county and there is no need to make estimates of this based on the acreage of agricultural land when they have the actual numbers. Mr. Martin said that he is not confident in the TMDL either, because the consultants are still continuing to ignore the Meadow Creek sewer interceptor as a source of bacteria. Ms. Garwood replied that they did talk about the interceptor at the last TMDL Steering Committee meeting and the consultants said they didn't have enough data on sewer overflows or leaks, and didn't have enough time to collect additional data, so they made an estimate of the bacterial load coming from the sewer interceptor.

Ms. Thomas asked if the Commission should demand the data from DEQ and the consultant through FOIA or other means. Ms. Frisbee suggested that perhaps the TAC should first look

more closely at the model output and do a gut check to see if there are parts of it that really don't seem right. Then we can request specific data if there are questions about those elements of the model. Ms. Thomas agreed that the Commission for now should leave it up to the TAC to review the materials and if the TAC needs some backing to get data, the Commission can help by perhaps writing a letter.

Mr. Austin also mentioned that Kristel Riddervold, one of the Charlottesville TAC members, has set up a web tool for the TAC which enables them to communicate with each other and post documents. Commission members should have received an email from Ms. Riddervold with a user name and password that will allow members to access the web tool to follow the TAC's work and communications if they are interested. TNC will continue to email to everyone all meeting minutes and agendas. If anyone has questions about the web tool or problems logging on, they should contact Ms. Riddervold.

The last item Mr. Austin talked about was the replacement of Chris Gensic, one of the Charlottesville staff TAC members. Mr. Gensic requested that he be removed from the TAC and replaced with someone from the Department of Neighborhood Development Services or Planning. Mr. Gensic's experience is in trail and park planning and he feels he does not have as much relevant technical expertise as an engineer or neighborhood planner has. He suggested the City consider appointing Marty Quinn (engineer), Khadija Abdur-Rahman (engineer), Brian Haluska (planner), or Missy Creasy (planner). Since the Commission needs to vote to appoint a replacement TAC member, and the Commission won't be meeting again this year, Mr. Austin suggested that the Commission consider voting tonight to appoint whomever Mr. Lynch and Ms. Hamilton identify as a replacement TAC member. This will ensure that once Mr. Lynch and Ms. Hamilton have identified a replacement for Chris, that person will be a member of the TAC and will be involved in TAC discussions while the Commission is on hiatus. Mr. Wilson moved that the Commission appoint whomever Mr. Lynch and Ms. Hamilton decide to appoint, Ms. Allen seconded the motion, and the motion was approved unanimously.

#### **10. Presentation by Sam Austin, U.S. Geological Survey, Commission TAC Chair**

Mr. Austin gave an overview of the water cycle and altered hydrology. He explained that when rain hits the ground surface, there are three main pathways it can take. Rain can infiltrate into the ground and become groundwater, it can evaporate from the surface and be taken up by plants and released through transpiration, or it can run off over the ground surface. Water can then enter streams through groundwater or surface runoff transport. The key with infiltration and groundwater transport is that this is a slow process, while surface runoff is much faster. This delay is a good thing.

He explained that in a forested undeveloped condition, the majority of the rain that falls is infiltrated into the ground and a small amount runs off the surface. The forest floor acts as a sponge to absorb most of the rainfall and allow it to soak into the ground. In contrast, in a parking lot, for example, most of the rain that falls immediately runs off the surface because it can't infiltrate the pavement. There is very little infiltration in this developed setting. This results in a lot more water entering streams through the fast pathway of surface runoff versus the slower pathway of infiltration and groundwater transport. Mr. Austin gave an example of this from a model that was developed for the Mechums River watershed. In this example, the

volume of surface runoff existing today was compared to an estimated volume of surface runoff under a hypothetical buildout scenario based on the Albemarle County Comprehensive Plan. The model showed that surface runoff volume increased by 92% with development.

This increase in surface runoff volume and speed at which water travels to streams can have serious environmental impacts. He showed an example of Meadow Creek in Charlottesville, and explained that streams like this were established when this area was forested, prior to development, and as a result, they are designed to carry the volumes of water they would have carried under a forested condition. Development in the watershed has caused higher volumes of surface runoff to enter streams than they were designed to carry, causing erosion of stream banks and stream beds and making streams unstable. The sediment eroded from these banks is deposited in the streams, causing excessive sedimentation and impacts on aquatic life.

Ms. Thomas mentioned that not only does development cause gullywashers and sedimentation, but it also results in less infiltration which means less groundwater recharge and a problem for our reservoirs during dry times. Mr. Moss asked if most groundwater recharge takes place in winter. Ms. Allen said that she has heard that in the summer a tree can take up as much as 400 gallons of water per day, which results in less groundwater recharge in the summer and more in the winter. Ms. Thomas added that there is a test well in Albemarle County where they are seeing more recharge in the winter. Mr. John Murphy with StreamWatch added that streamflows are lower in the summer even though it rains more in the summer. Mr. Wilson added that stream levels will even drop during the day and then rise again at night.

Ms. Thomas stated that she keeps thinking about how the Commission will get their Boards and the public to buy into the importance of addressing altered hydrology. She said the problem of decreased groundwater recharge may be the way. Ms. Allen thanked Mr. Austin for his presentation, but added that she still couldn't define altered hydrology if someone asked her what it meant. Ms. Thomas requested that the TAC provide the Commission with a 1-2 sentence "elevator speech" definition of altered hydrology.

## **11. Old and Unfinished Business**

### **Organizational Items**

#### **1. Discuss field trip ideas, briefly. (TAC will develop proposals for next meeting)**

Ms. Thomas said that as Mr. Austin reported, the TAC will develop a plan for field trips the Commission can take next year.

#### **2. Discuss website**

Ms. Garwood reported that TJPDC was willing to host a website for the Commission. TJPDC could also do the graphic design, and this would take about 30-35 hours at a cost of \$47-48/hour, for a total of about \$1400-1600. She said the design would be similar to the website TJPDC developed for the Piedmont Workforce Network (<http://www.piedmontworkforce.net/>). Mr. Moss said that Fluvanna County recently had two websites created by The Bald Guy and the cost was \$900 for each. The two websites are [www.fluvannahistory.org](http://www.fluvannahistory.org) and

[www.fluvannaheritagetrail.org](http://www.fluvannaheritagetrail.org). Ms. Thomas requested that Commission members look at these three websites to see if they seem like something the Commission wants for their website.

### **3. TJPDC report on septic ordinance and potential WQIF funding**

Ms. Garwood reported that she found out there won't be any WQIF funding for this year. Ms. Thomas asked Ms. Garwood to keep the Commission posted on funding for next year. She also said that Commission members might still want to see sample septic ordinances in the meantime. Ms. Garwood said she could talk about septic ordinances at a future meeting.

### **4. Review draft letter to formally introduce the Commission to DEQ**

Mr. Schuyler prepared a draft letter for the Commission to review. Members took a minute to read the letter. There were two small changes requested, and the Commission agreed to have Ms. Thomas sign the letter and send it once the changes are made.

### **5. Discuss Executive Committee**

Ms. Thomas asked Mr. Martin to explain to the group the idea for an Executive Committee. Mr. Martin said that the idea is to establish a smaller group that will meet monthly and have the full Commission meet quarterly. He said this would be a structure similar to that of the Thomas Jefferson Partnership for Economic Development, which seems to work well. He said that the composition of the Executive Committee could be one elected official from each locality and one or both of the SWCD members. He added that any Commission member could still come to the meetings even if they aren't on the Executive Committee.

Mr. Moss said that he thinks this is a good idea but asked what the Executive Committee's duties and powers would be and wondered if the Commission should amend the charter to lay these out. He said that items requiring expenditures of funds could go to a full vote of the Commission. Ms. Allen asked what the Executive Committee would do. She said she is fine with meeting as a full Commission monthly and added that the Executive Committee wouldn't have a quorum since it would only be composed of 6 members. Ms. Thomas replied that the committee would be a way of knowing that if there was something critical they can be sure people will come to the meeting. She said that the original expectation was that the Commission wouldn't be meeting as regularly as they have been. Dr. D'Odorico suggested that they continue to have regular meetings and whoever is available can attend. He added that at some point the Commission will need to form subcommittees to accomplish certain tasks. Mr. Martin said that he doesn't think the Commission will work without participation from all of the elected officials and he's worried because we're currently not getting their participation at the meetings. He thinks that there will be more participation with quarterly meetings rather than monthly meetings.

Ms. Thomas suggested that they proceed with a temporary Executive Committee for the next two months and at the next Commission meeting in January have the Executive Committee report on how it is working and if it is necessary to make amendments to the charter. Mr. Moss stated that members of the Executive Committee would be Mr. Easter, Mr. Runkle, Ms. Thomas, Mr. Moss, Ms. Allen, and either Mr. Lynch or Ms. Hamilton.

Ms. Allen mentioned that Mr. Cox will not be running for office again so Greene County will need to appoint someone to replace him on the Commission. Ms. Frisbee added that Mr. Lynch

and Ms. Hamilton are also not running for re-election, and Ms. Thomas added that Mr. Dorrier is running for re-election. Ms. Thomas stated that each entity should have prepared a slate of members for the January Commission meeting.

Mr. Moss also suggested that members of the Commission make presentations to their Boards about what the Commission is doing. Ms. Allen offered to give a presentation to the Greene County Board of Supervisors and Dr. D'Odorico offered to give a presentation to Charlottesville City Council.

**6. Discuss need and options for legal counsel, if there is new information**

Ms. Thomas reported that she did not have any new information at this time.

**7. Set next Commission meeting date**

The next meeting of the Commission was set for January 17 at 6 pm at the Thomas Jefferson Planning District Commission.

The first meeting of the Commission's Executive Committee was set for November 15 at 6 pm at the Thomas Jefferson Planning District Commission.

**Initiating Work Product**

**1. Review draft MOA for land cover and impervious cover product**

Commission members reviewed the MOA that was developed by Mr. John Murphy in collaboration with Albemarle County and TNC. Members felt that if TNC, Albemarle County, and StreamWatch were comfortable with the MOA, the Commission was comfortable with it also. Mr. Moss said that he wants to recommend to Fluvanna County that they pay to include the entire county in the mapping project. Mr. Moss made a motion to adopt the MOA, Ms. Allen seconded the motion, and the motion was approved unanimously. Ms. Thomas signed the MOA on behalf of the Commission.

**2. Discuss and act on TAC recommendations**

See "Reports of Committees" above.

**12. New business**

Ms. Thomas said that she serves on the board of the Lewis and Clark Exploratory Center which has a site located on the Rivanna River at Darden Towe Park where they plan to build a building along with trails and signage along the river. They are making an application for funding for the project. Ms. Thomas asked if the Commission would be interested in writing a letter of support for the funding application. She thinks this project will help heighten awareness of the Rivanna River for both children and adults. Dr. D'Odorico made a motion to send a letter of support, Mr. Moss seconded the motion, and the motion was approved unanimously.

Mr. Martin mentioned that there was a public hearing in Albemarle County last week, and that he is one of many citizens who are upset about the process and the outcome of the hearing. He thinks the Commission should be aware of this since it may affect their work. The hearing was about three watershed protection measure that had been vetted by the county staff. The

supervisors voted on one matter which was a 3-3 vote, and it was clear that the other votes would have been 3-3 as well. The supervisors who voted against the measures are all up for re-election. Mr. Martin added that even on the Commission there is one supervisor who voted for the measures (Ms. Thomas) and one who voted against (Mr. Dorrier). He added that he thinks at some point the Commission will have some very solid science to bring to their localities and hopefully recommendations for management strategies and he's concerned about what might happen when it comes time to vote on these. Mr. Moss replied that at some point it might be useful for the Commission to have a briefing of the measures that were proposed. Ms. Thomas stated that one lesson learned from the hearing in Albemarle was that to some people the act of owning land is an overwhelming passion and no amount of science or argument will convince them that these measures are the right thing to do. She added that there may be some people who will never think that our work or recommendations on altered hydrology mean anything. But she thinks a lot of people will understand and she is not deterred.

Mr. Moss mentioned an article he read about an effort the Chesapeake Bay Foundation is working on in Gloucester County to assist homeowners in better maintenance of their septic systems. He wondered if the Commission could get involved in a similar effort. Ms. Garwood replied that this project was funded by the WQIF which is not going to be available this year.

### **13. Adjournment**

The meeting adjourned at 8:10 pm.

#### **Attachments:**

- A. RRBC Agenda 07Oct18
- B. RRBC fiscal summary 07Oct18
- C. RRBC TAC 07Oct15 DRAFT
- D. Sam Austin presentation 07Oct18
- E. Longer runoff concentration 07Oct18
- F. Shorter runoff concentration 07Oct18
- G. Water Cycle 07Oct18
- H. DEQ Letter FINAL 07Oct23
- I. Land cover map final signed MOA 07Oct18