

**Final Meeting Minutes
Rivanna River Basin Commission
Executive Committee**

November 15, 2007

6:00 pm

Thomas Jefferson Planning District Commission
401 East Water Street, Charlottesville

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

The Executive Committee meeting was called to order at 6:15 pm by Ms. Thomas. The agenda for the meeting consisted of three main items: a) discussion of management strategies to address altered hydrology, b) preliminary work on items slated for January full Commission meeting, and c) setting the next Commission meeting date.

Management strategies to address altered hydrology

Mr. Sam Austin, Chair of the Commission's Technical Advisory Committee (TAC), gave a summary of the November 13 TAC meeting. The focus of the TAC meeting was to have a brainstorming session on what is known about management strategies to address altered hydrology. The intent of the meeting was to discuss and identify gaps in the TAC's collective knowledge of practices and determine next steps.

Mr. Austin reported that the TAC began their meeting with a discussion of roadblocks to implementation of management practices. One roadblock the group discussed is the fact that there are Virginia code provisions that hinder reuse of harvested rainwater in homes. Commission members suggested that the TAC come to the Commission with a recommendation for how the Commission might be able to encourage state government agencies to address this roadblock.

The TAC also talked about the need to better understand the effectiveness, cost, and maintenance requirements of various practices in order to better understand the roadblocks to implementation and determine which practices should be promoted. The TAC discussed the need to synthesize what is already known about practices and test some practices locally to gather region-specific information. The TAC also held further discussion about Biscuit Run as a potential site for testing practices. Mr. Austin stated that monitoring locally will provide information on effectiveness of practices taking into account the specific characteristics of our region (such as soil type) and will also show developers and the community that this can be done.

The TAC also talked briefly at their meeting about the possibility at some point of hosting a workshop with developers, engineers, permit reviewers, and others to share the information the TAC gathers about management practices and discuss roadblocks to implementation.

Mr. Austin report that 3 next steps came out of the TAC meeting:

- 1) Conduct a literature review to compile what is known about management practices.
- 2) Monitor practices locally, by working with a developer to encourage them to install practices at a new development (such as Biscuit Run), talking to sites who already have plans to install practices (such as the Waldorf School), or monitoring existing developments that have practices installed (such as Guildford Farm).
- 3) Work to export this information to the entire Rivanna watershed and beyond.

To begin the process of conducting a literature review, Greg Harper with Albemarle County volunteered to spend 10 hours over the next few weeks gathering research on management practices. The Nature Conservancy offered to post to the weblog information they have gathered on this topic. The intent of Mr. Harper's review is to give the TAC an idea of the amount of information available and the effort it would take to compile it into a synthesis document. This will help inform the TAC's decision about whether it is necessary to hire someone to conduct the literature review and prepare a synthesis document.

Ms. Allen mentioned Guildford Farm as a possible site to test management practices. She stated that Carl Schmitt was involved with this project and has just been elected to the Greene County Board of Supervisors. Mr. Moss suggested the Commission might take a field trip to Guildford Farm.

Ms. Thomas asked for clarification of how low-impact development (LID), such as what is in place at Guildford Farm, relates to the threat of altered hydrology the Commission has been discussing. Mr. Ridge Schuyler or The Nature Conservancy responded that the Commission has decided to address altered hydrology, and the opposite of altered hydrology is unaltered

hydrology or the natural forested condition. The goal is to replicate what the forest would have done in terms of infiltration, runoff, and evaporation. This is in contrast to the goal of conventional stormwater management which is to replicate the pre-development condition, or the land use that exists on a site now. Mr. Schuyler stated that the question is which practices can replicate the hydrology of the forest. He added that LID can do some of this, but may not necessarily be the answer. The TAC wants to gather information on what has been done and test practices on the ground to determine which practices are the best at replicating the forested condition.

Ms. Thomas added that she preferred talking about the forest to talking about LID. She said that at a recent Albemarle County Board of Supervisors meeting there was a proposal that a group wanted to install raingardens instead of a stormwater pond. She thought the raingardens were very unattractive and staff thought they would not work well because future homeowners might find them unsightly and might mow them or put trash in them. Ms. Thomas added that she thinks if we talk about promoting LID people may think they only need to put in a practice such as a raingarden and they are done. She thinks we should say we are going for the forested condition. Mr. Moss agreed, saying that he thinks there is a desire for people to do a few green things here and there that really don't get the job done. He added that we need to encourage people to take bigger steps. Mr. Schuyler stated that the reason the TAC is interested in demonstrating the practices to developers is to get feedback on what might work. He added that he believes, based on the research he has done, that it is possible to narrow it down to a few practices that will work on most sites.

Mr. Moss asked how the TAC would move forward. Mr. Schuyler responded that with the TAC's expertise they have gathered some literature on what is known about these practices, but someone needs to pull the literature together and synthesize it to create a document that can be shared with engineers, developers, local government staff, and others. This document can then be taken to stakeholders to see if they will agree to allow practices to be implemented. Testing of practices will also be done to see if the practices work here like they do in these other places we've seen data from.

Mr. Moss mentioned the new Fluvanna High School as a possible place to test practices. Ms. Allen added that there is a potential site in Greene County where the developer would likely go along with this. Mr. Schuyler said that he has talked to Hunter Craig about rainwater harvesting at Biscuit Run as one type of practice to address altered hydrology. Mr. Craig is interested in this in part because it's the right thing to do but also because he thinks it will make his homes more marketable. Mr. Schuyler went to the county to talk to the staff about rainwater harvesting at Biscuit Run and they asked him if he could show that it will work as a stormwater management tool. He added that the county is pleased to see new things, but they need to have some evidence that the practices will work. The county may be hesitant to allow all the homes in Biscuit Run to have innovative practices, but it may be possible to do comparisons with conventional and new practices in different subwatersheds of the Biscuit Run property. He added that Biscuit Run is just one example, and there may be other places to test practices.

Mr. Schuyler said that if the TAC decides to proceed with hiring someone to do a literature review, the Commission will need to vote to approve funding. He said that the TAC could also

decide they can do the literature review themselves. He added that his feeling is that the TAC members all have full time jobs and the literature review should be contracted out. He said the TAC will come to the Commission with a recommendation for how to proceed with the literature review in January. Ms. Thomas added that if the Commission is going to try to convince the public, we have to have a good message so people don't get lost. Mr. Moss said that a demonstration of these practices is critical to getting acceptance and mentioned that the Fluvanna High School could be a good demonstration site and is going into design phase in spring. Mr. Wilson stated that if the TAC decides it is necessary to hire someone to do a literature review, it would be great if the TAC can prepare a scope of work for the Commission to vote on so the TAC can move forward with the RFP process soon.

Mr. Schuyler stated that one example of this type of thing is a redevelopment project in Seattle where they were only able to install practices in the road right-of-way. They worked with the developer to engineer the swales along the road to add amendments to allow infiltration rather than just having the runoff from the road conveyed quickly to the stream. The University of Washington monitored the system and found that 97% of the road runoff was infiltrated. Ms. Thomas pointed out that the rain in Seattle is slower so they don't get gullywashers like we do here. Mr. Schuyler responded that this is exactly why we need to test these practices here to see what works in our setting. He added that the swales were just one practice and we could make much more progress if we also did rainwater harvesting, soil amendments in lawns etc. He said that the Seattle study was able to replicate a meadow, and we may be able to go all the way to replicating a forest with a suite of practices.

Mr. Wilson mentioned the John Paul Jones Arena parking lot which has been very carefully designed to allow infiltration. Ms. Thomas suggested this may be another place the Commission visit on a field trip, and wondered if they were collecting data. The group did not know if data were being collected at the arena. Mr. Schuyler added that doing monitoring could be a unique role the Commission plays because there isn't a lot of monitoring of these sites being done. Mr. Moss suggested that they may be able to convince UVA students to do some monitoring as well. Ms. Thomas mentioned that Monticello High School has some infiltration practices and she wondered if anyone had been monitoring them. Mr. Wilson replied that these practices were installed by Dave Hirschmann and have been in place for ten years. He said he thinks Norma Dean at Piedmont Community College may have studied them and said he would check with her to see if she had any information.

Ms. Thomas asked if the TAC was also working on developing field trip ideas for the Commission and Mr. Austin replied that the TAC will present a specific list of field trip ideas at the January Commission meeting.

Preliminary work on items slated for January full Commission meeting

Ms. Thomas suggested a reminder be sent to all Commission members prior to the January meeting to have everyone look at the potential website options and come to the meeting with ideas of what the Commission website should look like.

The Commission also talked about the need to appoint new members to replace those that will be leaving. City Councilors Kevin Lynch and Kendra Hamilton will need to be replaced, along

with Greene County Supervisor Mickey Cox, and John Easter with the Thomas Jefferson Soil and Water Conservation District. The Nature Conservancy and the remaining Commission members will work to try to have new members in place in time for the January Commission meeting.

At the last Commission meeting, members expressed an interest in writing letters of thanks to the people who have donated money to the Commission. Mr. Schuyler suggested that, to protect the privacy of the donors, the Commission compose a letter and The Nature Conservancy send it to the members. Ms. Thomas and other members agreed and asked if Mr. Schuyler would draft a letter for review at the next Commission meeting.

In regards to the need for legal counsel, Ms. Thomas stated that the Albemarle County attorney was concerned that the Commission should have legal counsel, but she said that the Commission has not needed it thus far.

Ms. Allen stated that she is very interested in seeing model septic ordinances and talking more about this at the next meeting.

Dr. D'Odorico pointed out that the Commission has been talking about altered hydrology but hasn't discussed minimum flows recently and wondered if they should be talking about this. Ms. Thomas replied that there is a community water supply plan that has been developed and The Nature Conservancy did a study to determine the minimum flows required to protect the aquatic system. Permits for the plan haven't been given yet and the City and County haven't decided yet how to pay for the plan. She added that the South Fork Rivanna Reservoir is filling in with sediment so there is a need for expanded storage capacity to meet the growing needs of the population. Dr. D'Odorico asked if the plan included dredging the reservoir. Ms. Thomas replied that the dam at the Ragged Mountain reservoir is failing so that needs to be replaced anyway. The idea is to build a taller dam, but since the Ragged Mountain watershed is too small to fill the expanded reservoir on its own, there will be a pipe put in place to draw water from the South Fork Rivanna Reservoir which has a bigger watershed. Mr. Schuyler added that the plan will enable restoration of flows to the Moormans River and that The Nature Conservancy was very involved in doing a study to restore these flows. Thus, the Commission has decided to focus on altered hydrology at the high flow pulse end, since hopefully the low flow part is being addressed by the community water supply plan. Mr. Martin added that DEQ wants to enforce the releases, and Rivanna Water and Sewer Authority is not comfortable with that, so that could cause a problem.

Ms. Thomas said that the Commission may want to get together with the Rappahannock River Basin Commission sometime in the future, and Mr. Martin agreed that this is a good idea. Mr. Schuyler replied that the Rappahannock River Basin Commission has thirty or more jurisdictions and they have been more of an information-sharing group and not involved in planning, so they are a bit different than the Rivanna River Basin Commission.

Mr. Schuyler added that UVA is planning a symposium to bring developers, engineers, local government staff, and others together with a focus on watershed planning. He said that the Architecture and Darden schools are planning this together, and they want to know if the

Commission would be interested in getting involved. Their goal is to have people from all over the world attend the symposium, and they want to focus on local sites.

Set next Commission meeting date

The Executive Committee decided not to meet in December. The next full Commission meeting was set for January 17, 2008 at 6:00 pm at the Thomas Jefferson Planning District Commission.

The meeting adjourned at 7:45 pm.

Attachments:

- A. RRBC EC Agenda 07Nov15
- B. RRBC TAC 07Nov13 DRAFT