

**Final Summary
Technical Advisory Committee
Rivanna River Basin Commission**

August 23, 2007

1:00 pm

The Nature Conservancy
490 Westfield Road, Charlottesville

Attendance

TAC Members

Present:

Mr. Sam Austin, USGS Virginia Water Science Center
Mr. Roger Black, Fluvanna County
Ms. Kate Cooper, Fluvanna County
Mr. Travis Estes, Greene County
Ms. Rochelle Garwood, Thomas Jefferson Planning District Commission
Ms. Stephanie Golon, Greene County
Mr. Greg Harper, Albemarle County
Mr. David Hirschman, Center for Watershed Protection
Mr. Ed Imhoff
Mr. John McClain, Virginia Department of Transportation
Mr. John Murphy, StreamWatch
Ms. Kristel Riddervold, City of Charlottesville
Mr. Jeff Sitler, University of Virginia
Mr. Ridge Schuyler, The Nature Conservancy
Ms. Andrea Terry, Rivanna Water and Sewer Authority

Absent:

Ms. Tamara Ambler, Albemarle County
Ms. Louise Finger, Virginia Department of Game and Inland Fisheries
Mr. Chris Gensic, City of Charlottesville
Ms. Alyson Sappington, Thomas Jefferson Soil and Water Conservation District
Mr. Wil Smith, U.S. Fish and Wildlife Service
Mr. Greg Wilhelms, Culpeper Soil and Water Conservation District

Rivanna River Basin Commission (Commission) Members Present

Dr. Paolo D'Odorico, Charlottesville Citizen
Mr. John Martin, Albemarle County Citizen

1. Introductions

Mr. Schuyler welcomed the group and introductions were made.

2. Discuss process for appointing Chair

Mr. Schuyler stated that at the end of the last meeting, several TAC members recommended that Sam Austin be appointed Chair of the TAC. Mr. Schuyler said that since the last meeting, some members have suggested that the process of appointing a Chair be more formalized. He asked if members of the group had thoughts on how the TAC should go about appointing a Chair, in hopes that a Chair can be in place for the next TAC meeting. Several different options were discussed, and the group decided to move forward with appointing a Chair at this meeting rather than waiting until the next meeting. Mr. Imhoff nominated Sam Austin as Chair, and this nomination was unanimously approved. No other nominations were submitted. Mr. Austin accepted and thanked everyone for appointing him.

3. Further discuss threats to Rivanna watershed

Mr. Schuyler gave a summary of the TAC's discussion of threats to the Rivanna watershed to date. He said that the Commission has asked the TAC for guidance about which threats are the most important to address. The hope is that the Commission can promote management strategies to abate the threats. The goal of the discussion at the July TAC meeting was to determine if there was consensus on certain threats, how confident everyone was about the magnitude of the threats, and where resources need to be invested to get a better understanding of the threats. Members voted for the top three threats and indicated their confidence level in their votes. "Altered hydrology/landscape changes" was ranked as the top threat, followed by "sedimentation" and "dam management/flow regimes." Other stresses resulting from altered hydrology were discussed, including scour of stream channels and reduced infiltration. There was also a good bit of discussion about the relationship between altered hydrology and sedimentation. At the end of the July TAC meeting, the group determined they wanted to further discuss these threats before making recommendations about next steps the Commission should take.

A lengthy discussion followed this summary, with three areas of emphasis. This began with a discussion of threats and was followed by a discussion of desired future condition, which led to a discussion of categorization of the watershed.

To follow up on the July TAC meeting, TNC developed a list of the effects of altered hydrology for the TAC to review and discuss in an effort to get a better understanding of the threat and determine the areas of focus for the Commission. The list of effects of altered hydrology TNC prepared included:

Effects of Altered Hydrology

- High flow pulses
 - Streambank erosion
 - Scour of habitat
 - Change in channel morphology
 - Accelerated inputs of sediment from legacy stream sediment erosion
 - Accelerated inputs of sediment from streambank/streambed disturbing activities

- Accelerated inputs of overland pollutants
 - Sediment
 - Bacteria
 - Nutrients
 - Toxins (e.g., pesticides, heavy metals)
- Lower flows
 - Lowered baseflows due to reduced infiltration
 - Lowered flows due to dam management

As the TAC began to discuss the list of threats, the discussion moved toward a focus on the importance of setting a desired future condition to help set goals and assess success. The members decided that the desired future condition should include a verbal description of the goal with specific quantifiable criteria, and may also include language to ensure stability of the system. It was pointed out that there may be different threats to subbasins within the Rivanna, and the TAC needs to be sure to look at threats at the appropriate scale. Because there may be differences between subwatersheds, the desired future condition may be different for different subwatersheds.

This led to a discussion of how best to categorize the watershed for assessing threats and determining desired future condition. The group acknowledged that the categorization could be based on many different things such as threat, management strategy, desired future condition, etc. The group listed some potential ways they could categorize, including indicators such as impervious surface and riparian forest condition as well as characteristics of watersheds/streams such as stream order, impaired vs. unimpaired waters, drainage basin size, and physical characteristics.

The TAC decided that further discussion was needed on these topics, and determined that they wanted to meet again soon to continue this discussion.

4. Discuss collaborative mapping project – John Murphy

Mr. Murphy presented a proposal for a TAC recommendation to the Commission to take part in the purchase of an updated land use map for the Rivanna watershed. StreamWatch, The Nature Conservancy, and Albemarle County have identified the need for an updated land use map of the watershed and Albemarle County. The groups have met 5 or 6 times and have developed a project scope, reviewed proposals for the work, and selected two potential contractors. The map would have five categories: deciduous forest, coniferous forest, mixed forest, open land, and impervious surface. Mr. Murphy said that a lot of the discussion at the TAC meeting today is related to the need for an updated map for classifying the watershed and developing thresholds for a variety of parameters. The map would also be useful for other purposes. The proposal he presented is for the TAC to recommend and request that the Commission join in the collaborative purchase of the map. Mr. Murphy discussed various cost estimates and sharing of responsibilities.

There was some discussion about how often the map would be updated and the potential uses of the map. It was also mentioned that the land cover maps currently available for this area are

either outdated or are too coarse to be useful for the types of analyses needed. Mr. Murphy is hoping to have the map purchased by this fall.

Several TAC members suggested edits to the proposal. Ms. Riddervold suggested the TAC vote on whether to continue to talk about this as an actionable request of the Commission. The motion was seconded and it was determined that the group should review a revised draft of the proposal, suggest additional changes, and then approve the final proposal and move forward with making a recommendation to the Commission.

The next meeting of the TAC was set for September 19 at 2 pm at TNC.

Attachments

A. Map Proposal 07Aug23