

FINAL

Thursday, September 20, 2007

To: The Rivanna River Basin Commission

From: The RRBC Technical Advisory Committee

Subject: TAC September 19 meeting summary

Yesterday's Technical Advisory Committee meeting was energetic and productive. We reviewed a draft mapping proposal presented by John Murphy and continued our substantive discussion of significant water resource threats within the Rivanna River Basin and pathways toward desired future watershed conditions.

The TAC resolved to bring the following recommendations to the Commission.

1. The TAC recommends approving and moving forward with the mapping project as proposed by John Murphy. The map will provide an up-to-date baseline characterization of land cover and land use features at a level of detail essential to facilitating decision making by the Commission.
2. The TAC recommends identifying Altered-Hydrology as a systemic and overarching threat to the health and sustainability of water resources within the Rivanna River Basin. Such identification will facilitate focused actions to develop tools, guidance, and recommendations that restore naturally occurring hydrologic conditions throughout the watershed.

Altered-Hydrology has to do with changes in the amount and speed of water moving to our streams and rivers. For example, when we interrupt a naturally occurring pathway that water takes, such as when it soaks into the soil and moves slowly underground to a stream, and replace it with a pathway over the top of the ground, the naturally stable hydrology is altered. A lot more water moves a lot faster over the top of the ground, reaching the stream more quickly and often carrying sediments and nutrients along for the ride.

Many threats to water quality and watershed health, such as excess sediment and nutrient exports to streams, and degradation of streams, are linked to altered-hydrology. Restoring naturally occurring soil water infiltration rates, storage capacities, and variations in stream and river water flow will help prevent these and other problems.

The TAC will continue its discussions of outcome-based measurements that could be used by the Commission to gauge progress, and suggestions of effective management options to offer for the Commission's consideration.

Respectfully submitted by Samuel H. Austin, TAC committee chair.

Attachments:

- A. Desired Future Conditions memo 07Sep19
- B. Map recommendation 07Sep20
- C. Map Proposal 07Sep19