Cunningham Creek Technical Advisory Committee Meeting

Fluvanna County Library

August 1, 2017

Attendees

Dana Bayless (NRCS)
Roger Black (Fluvanna County)
Craig Lott (VADEQ)
Brian Walton (TJSWCD)
Robbi Savage (RCA)
David G Thomas
Anne Coats (TJSWCD
Nesha McRae (VADEQ)
James Newman (Fluvanna County)
Chuck Wright (VADOF)
Tom Pratley (TJSWCD)
Ida Swenson (RCA)
Jessica Dodds (RCA)
Claudia S Goin
Ashley Wendt (VADEQ)

Summary

Nesha McRae (DEQ) welcomed the committee back together, starting with introductions around the table before reviewing the meeting's agenda. After introductions concluded, the Rivanna Conservation Alliance announced that they are now Level 3 certified for both benthic and bacteria monitoring. This is a significant accomplishment, with no other citizen monitoring organizations in the state currently certified for both monitoring methods at this level. Nesha laid out the agenda for the meeting. To begin, Nesha emphasized the priority of making sure that the watershed plan meets the funding criteria for receipt of EPA Section 319 implementation funds before transitioning into discussion covering the overall planning approach. There are nine criteria that must be met within a watershed plan in order for DEQ to award 319 funds for implementation of that plan. We will work to ensure that these criteria are met in Cunningham Creek. Nesha explained to the committee that the watershed plan would be different than a TMDL implementation plan as it would be working in a reverse order, meaning the committee will identify problem areas in the watershed and associated solutions, and then the pollutant reductions associated with these solutions will be calculated to determine the endpoint or overall pollution reduction goal. The nature of the impairments and the Cunningham Creek watershed are well suited for this approach since the impairments are very moderate and the problem areas within the watershed are minimal.

Following this introduction to the planning process, Jessica Dodds (RCA) presented RCA's spring biological and bacteria monitoring data to the group. Spring results were very similar to those from the previous fall. The ASCI scores from all three of the sites were above 60, rating either good or very good. E. coli concentrations remain high on the South Fork tributary, while concentrations at the other sites fell below the single sample maximum criterion of 235 cfu/100ml.

Brian Walton (TJSWCD) provided an update on their plans for outreach to farmers in the watershed. The SWCD plans to do a targeted mailing to landowners in the watershed in order to encourage those with cows in the stream to participate in agricultural BMP cost share programs. Nesha noted that this

early push with respect to outreach will hopefully help to get the project off to a faster start once the plan has been completed.

The group moved on to discuss specific agricultural best management practices that could be used to address problem areas in the watershed. Different practices discussed included livestock exclusion, pasture management, and cover crops and continuous no till. Using GIS, Nesha found that an estimated 39,210 feet of livestock stream exclusion fencing is needed in the watershed. In some cases, fencing will be needed on both sides of the stream, and in others, on only one side. This equates to 27 different projects. The committee discussed three fencing options: 100 foot fencing setback and buffer, 35 foot fencing setback and buffer, 15 foot fencing setback. Nesha explained that farmers can receive a larger cost share payment for fencing set further back from the stream. 50% cost share is available for fencing with a 15 foot setback, while fencing with a 35 foot setback may be eligible for 85% cost share. While the 100 foot setback and buffer seems most ideal from a water quality perspective, the committee found that not many farmers would want to sacrifice that much of their land in this watershed where many do not have an excess of land. One participant asked what landowners can do within the buffer area in terms of management. NRCS and DOF representatives explained that CREP contracts are usually 10-15 years long and limit what you can do within the buffer. It can be managed to control invasive species. From a management perspective, it would not be wise to harvest timber grown in the buffer. Although the 100 foot buffer opens for opportunity for the farmer to earn more money through the Conservation Reserve Enhancement Program, the committee concluded that very few farmers (if any) would be willing to go over a setback over 35 feet. In addition, there is some uncertainty about the future funding status of CREP in Virginia. It was noted that extending the buffers to 100 feet may not produce that much greater of a pollutant reduction with respect to its trapping and filtering capacity. The 35 foot setback and buffer seemed to be the most realistic option of livestock exclusion after discussion, with the committee predicting that about 90% of farmers would prefer this option. The group agreed that the remaining 10% would opt for the 15 foot setback due to space constraints. There is also room for fencing innovations as some farmers may have issues with maintaining fencing that meets the specifications established by state and federal cost share programs. In addition, some farmers may not want to set fencing back even 15 feet from the stream. The committee discussed whether or not there is a need for something similar to the Flexible Fencing Program that was implemented in the Shenandoah Valley several years ago. This program provided cost share for fencing at the top of the streambank with a single strand of polywire. Farmers could also get assistance with installation of off stream water through this program. The group discussed the applicability of such a program in Cunningham Creek and whether or not a portion of the fencing included in the plan should be allocated to a program like this. Representatives from the TJSWCD expressed concerns that we would be setting the bar too low. The group discussed whether it would be advantageous to include it in the plan regardless so that if needed, funding would be available. Nesha explained that this is not something that DEQ would typically fund through the 319 program, so from a funding perspective, it's not necessary. The group decided to keep things simple and leave it out of the plan.

The group discussed some of the selling points of livestock exclusion to farmers including cows falling in to streams where banks are very high. Roger Black (Fluvanna County) pointed out that when cattle have unrestricted access to the stream, there is increased chance of injury as well as disease transmission.

Black cited cattle research showing increased health in livestock which were excluded from the stream compared to those with unrestricted access. Nesha noted that DEQ has had a large animal veterinarian come and speak about water quality and livestock health at community meetings before. This has been a great outreach strategy in the past.

The group moved on to discuss pasture management practices. The committee agreed that many pastures in this area are overstocked with cattle, and that most farmers are reluctant to adopt rotational grazing as a new management strategy. Therefore, the cattle graze the same land all year round and farmers have to feed hay for most all of the winter. The committee believed that this should be an area of focus during outreach with farmers due to the many benefits for their cattle and their overall operation in terms of productivity and ease of management. Adopting rotational grazing will result in less work for the farmer over time as cattle become conditioned to the changes in management. Ultimately, this will lead to less time and labor in cutting hay for feed as pastures are given time to recover after grazing .

Nesha asked the group about marginal pastures in the watershed where highly denuded areas have formed. This could be due to feeding livestock in low lying areas, or overgrazing steeper pastures. Farmers can receive cost share for tree planting on these pastures. A representative from DOF noted that he had signed up about 10 acres of land within Fluvanna County for this practice in the last year. Based on this estimated sign up rate and the size of the watershed, an annual planting rate of 1-2 acres per year could be used in the watershed plan. Nesha asked the group about areas where severe erosion is occurring on pastures. She explained that there is a cost share BMP that allows landowners to reshape areas that have become severely denuded and stabilize those areas with vegetation. Nobody was aware of conditions like this in the watershed, but Nesha will follow up with an assessment based on aerial imagery.

The group agreed that they would prefer a longer meeting in order to maximize their time for discussion. Nesha explained that the next meeting would be held in 6-8 weeks, and that the committee will review the remaining information on BMPs for the watershed including cropland, and residential/urban areas in the watershed. The group agreed that the library was a great place to meet and that the same time of day would work for the next meeting. The meeting was adjourned.