

## **Cunningham Creek Technical Advisory Committee Meeting**

Fluvanna County Library, Palmyra VA

September 19, 2017

### **Participants**

Robbi Savage, RCA

Ida Swenson, RCA

Tom Pratley, TJSWCD

Roger Black, Fluvanna County

Brian Walton, TJSWCD

Nesha McRae, VADEQ

Claudia Goin, Landowner

### **Meeting Summary**

The meeting began with a discussion of estimates of livestock exclusion systems needed in the watersheds to exclude all livestock from the streams. Nesha McRae explained that estimates of the different types of exclusion systems were developed using input from the last working group meeting regarding the potential for local interest in various fencing setbacks. It is estimated that 90% of systems installed will have a 35-foot buffer, while the remaining 10% will have a 15-foot buffer. The number of systems for each subwatershed was estimated using tax parcel data. All fencing identified as needed within each tax parcel was designated as one fencing system. Nesha explained that at the next meeting, cost information will be presented for these exclusion systems. One participant asked about these costs will be calculated and how the different types of fencing will be considered. Nesha explained that the cost list developed each year by the Thomas Jefferson SWCD will be used to estimate different component costs and then to calculate an overall system cost. Less intensive fencing will be assumed for cross fencing and for fencing installed using the 15-foot setback practice, while more intensive (and costly) fencing will be used to develop estimates for stream exclusion fencing with 35-foot buffers.

The group moved on to discuss practices needed for cropland. Nesha asked the group about the use of cover crops and the watersheds and explained that the low value of 15% was used as a goal for cover crops in the watershed due to the fact that most farmers are already planting cover crops. It was noted that acres of cropland in the watershed has increased over the past few years, so it would be a good idea to include a few cropland BMPs in the plan. Several participants discussed how most ground is left covered throughout the year, but that often when wheat is harvested before planting beans, the wheat is cut very close to the ground leaving very little residue on the soil surface. However, there is not much of an opportunity for erosion and runoff since beans are usually planted within a few days after wheat is harvested. Participants explained that this is largely due to the high value of straw right now. It was noted that there is one field that is deep tilled and left uncovered in the watershed. It is about 20 acres, so the estimate of 26 acres of cover crops seemed accurate. The group discussed opportunities for continuous no till in the watershed as well. It was estimated that 200-300 acres is already under no till or low till right now. The estimate of 10% of cropland seemed appropriate to participants.

One participant asked whether orchards and vineyards are considered cropland. Nesha replied that she did not think that these land uses were considered as cropland, and that traditional cropland

management practices would not apply. A representative from the TJSWCD added that the District does not typically work with landowners of orchards and vineyards. They have worked with landowners growing pumpkins in the watershed as they are a common specialty crop in this region. It was noted that it would be nice if orchard owners would maintain suitable cover on the strips between their vines. Vineyard owners are typically focused on getting appropriate air flow in between vines, which can lead to management practices that are not environmentally friendly such as planting against contour lines. Middle Fork Farm and Fruit Hill Orchard are the only two orchard/vineyard operations in the watershed. They are both well managed, making the need for management practices to address these operations in the plan questionable. The group agreed that some management guidance for orchards and vineyards could be included in the plan, but that practices did not need to be explicitly quantified for these operations. One participant added that there may be some additional conversion to cropland from land that is current being used for hay.

The group moved on to review a table of estimates for septic system BMPs needed in the watershed. Nesha explained that these estimates were developed in consultation with local Health Department staff. The group agreed with the estimates and noted that there are no opportunities for connection to public sewer in the watershed, with the sewer line ending at the high school. The group liked the idea of including a pump out program in the plan as a way to identify failing systems, and agreed that the goal of 25% of homes in the watershed seemed appropriate.

The group discussed opportunities to manage pet waste in the watershed. Nesha explained that it is far more cost effective to address pet waste as a behavior change rather than through stormwater management practices. Participants noted that there is one park in the watershed, but that pets aren't allowed there. There are a number of hunting dog kennels scattered throughout the watershed, including one with around 100 dogs in the North Fork Cunningham Creek watershed. Nesha noted that a larger pet waste composting facility could be included for an operation of this size. There may be a couple of additional opportunities for large scale composting at dog kennel operations in the watershed (maybe 2-3 total). The group discussed how smaller scale backyard pet waste composters function, and agreed that there may be a few opportunities for these in a couple of subdivisions in the watershed (Taylor Ridge, Cunningham Meadows and Fox Hollow). The group discussed opportunities for pet waste stations in the watershed. These will be limited since there are no parks where pets are walked in the watershed. These stations should really include a trash receptacle in addition to a bag dispenser or pet owners will just leave bags of waste on the side of the road. Maintaining these stations will be an issue. The Fox Hollow subdivision does not have a homeowners' association, so perhaps one of the other two subdivisions should be considered for pet waste stations instead. If they have HOAs, they could be approached about maintaining the stations. A targeted pet waste campaign could be initiated in these subdivisions. This effort could include a small number of several different types of practices (5 composters, 2 rain gardens, one pet waste station). Rivanna Conservation Alliance could lead this effort, and coordinate bacteria monitoring below the subdivisions to demonstrate water quality improvements following implementation. Outreach will be very important for this effort since homeowners will need to make behavior changes.

Nesha asked the group about opportunities for stormwater retrofits to existing infrastructure. She explained that these sorts of projects are typically very cost effective since large detention basins typically treat a large volume of runoff. One participant noted that the county is working with Tenaska now to address issues with three stormwater structures that are overgrown and no longer functioning

as designed. This could be a good opportunity for a public private partnership if Tenaska agreed to go above and beyond what is required with respect to stormwater management on the property. However, upon further discussion, participants felt like it might be better to explore other opportunities for retrofits since Tenaska has sufficient funds available to make these upgrades on their own. Nesha and Roger Black are going to work on identifying other basins in the watershed that would be suitable candidates for retrofits.

One participant asked whether any updates were available on the status of the dam rehabilitation project that DGIF is leading at the Ruritan Lake dam. Roger Black noted that he had seen some equipment out at the site recently. Nesha added that she had been told that this project would be underway this fall. The group discussed the impacts that this dam has had on the creek over the years, and asked whether DGIF will be responsible for removing sediment that has been deposited downstream of the dam over the years. It was suggested that this could be included in the watershed plan. Nesha explained that while DEQ could ask DGIF if there were plans to address this sediment, but that it could not be required as part of the watershed plan. Another participant asked if DCR could be contacted in regards to this issue since their Division of Dam Safety oversees dam operations in the Commonwealth. Nesha explained that DCR Dam Safety staff are charged with oversight of dam safety, but do not have any regulatory authority when it comes to environmental impacts of dam operations. DEQ will only get involved in dam operations when an acute response to these operations is caused with respect to the stream (such as a fish kill). One participant noted that there is a species of darter that has been found in the Cunningham Creek watershed that is considered to be a T&E species. Perhaps if DGIF were made aware of this, they would be more willing to address downstream environmental concerns. Nesha offered to follow up with DGIF on the status of the project and their willingness to address downstream sediment deposits as part of the rehabilitation project.

A participant asked whether the plan will include any practices for horse farms in the watershed. These operations can frequently be subject to overgrazing. Nesha responded that there is a small acreage grazing practice that could be included for these operations. In addition, demonstration practices were developed for another TMDL implementation project in Clarke County to address barnyard runoff and manure composting. However, participation in these practices was very low. The group agreed that there had been some previous discussion of these operations in the watershed, but participants weren't sure what the conclusion was. Nesha offered to follow up on this and see if there was a need for these practices in the watershed.

The group wrapped up the meeting with a discussion of next steps. Nesha explained that at the next meeting, the group will review cost estimates for both agricultural and residential practices and develop a timeline for implementation along with education and outreach strategies. Following that meeting, a draft plan will be completed, and the group will convene once again to review the plan. After that, a public community meeting will be held to present the draft plan to the public and kick off the 30-day public comment period.

Nesha thanked participants for their attendance and the meeting was adjourned.