

Blacks Run and Cooks Creek TMDL Modification
Technical Advisory Committee Meeting #1
June 29, 2017: DEQ Valley Regional Office

Attendees

Megan O’Gorek (DEQ)	Kelley Junco (Harrisonburg)
Dale Chestnut (JMU)	Liza Vick (CSPDC)
Bruce Harmon (DOF)	Emily Riggleman (SVSWCD)
Ashley Hall (Stantec for VDOT)	Megan Croushorn (SVSWCD)
John Ware (Bridgewater)	Conrad Wyrick (DEQ)
Alex Wilmer (Bridgewater)	Alston Horn (CBF)
Rebecca Stimson (Harrisonburg)	Cory Guilliams (NRCS)
Katie Shoemaker (3E Consulting)	Megan Dalton (SVSWCD)

Meeting Summary

Nesha McRae (DEQ) began the meeting by providing participants with background information on the rationale for the TMDL modification. Nesha explained that when the sediment and phosphorous TMDLs were completed for the watersheds in 2002, only four discharge permits were included in the wasteload allocations for sediment and phosphorous. At the time, there were a number of existing permits that were not included in the TMDL. In addition, a number of new permits have been issued since 2002. Based on the growing point source load that DEQ has been tracking in the watersheds, it was determined that the existing TMDLs must be modified in order to account for these point sources. Nesha shared water quality data for both of the creeks, which showed some signs of improvement over time, but that the impairments still remain. Participants expressed concerns about how this previously unaccounted for point source load will be integrated into the TMDLs with respect to the additional reductions that will be needed from the non point source side. It was noted that some of the land based reductions called for in the original TMDLs are already quite high and that it will be very challenging to meet even great goals for these land uses. However, participants agreed that quite a bit of work has been done in the watersheds since 2002, which can be credited towards the reductions that are needed.

The group reviewed land use data used in the original TMDL along with the new 2016 land cover data that will be used in the modification. One participant noted that these two data sets cannot be compared due to differences in the way that land cover categories were classified. The new VGIN forest category cannot be compared with the old category as it includes tree and shrub categories, which generally leads to an increase in forested acres. Participants agreed that forest cover has not increased in the Blacks Run watershed since the original TMDL was completed in 2002 and suggested revising these figures. A representative from DOF noted that they use FIA data to estimate forest cover. Nesha agreed to work with Katie Shoemaker (3E Consulting) to investigate this data set. Participants noted that in agriculture, the trend has been to convert pasture/hayland to cropland since 2002.

Nesha explained the modeling approach that DEQ is planning to take for the Cooks Creek and Blacks Run watersheds. The reference watershed that was used previously for Blacks Run is now listed as impaired for benthics. After searching for comparable, urbanized watersheds that were not impaired and could

be used as a reference for Blacks Run, it was determined that there were no suitable candidates. DEQ staff discussed various options with their contractors and decided that it would be best to use Hays Creek as a reference watershed (it will also be used as the reference for Cooks Creek). While it is not an ideal reference for Blacks Run due to the fact that it is not urbanized, other watershed characteristics make it a suitable reference in other ways. Nesha explained that the lack of unimpaired urban watersheds is a growing problem across the state. The AllForX model has been used in some cases when suitable reference watersheds cannot be identified as it allows for several reference watersheds to be used. Since the Blacks Run and Cooks Creek TMDLs are being modified and the GWLF model was used to develop these TMDLs in 2002, DEQ decided that it would be best to try to remain consistent with the original modeling approach. One participant raised concerns about this approach and said that she felt VA was trending towards using the AllForX model in TMDL development for benthic impairments, and thus this would be her preference.

The group moved on to discuss various permits in the watershed and how best to address them in the modification. There are 39 VPA permits in the watersheds, which will be included in the load allocation rather than the wasteload allocation. These permits are treated differently than VPDES permits since they are addressed as non point source pollution. A review of nutrient management plans corresponding with these permits indicated that most permit holders in the watersheds also have small dairies, and are meeting their crop demands with liquid dairy manure. Consequently, most permit holders are transferring their poultry litter off of the farm. Nesha asked participants whether they thought most of this litter was leaving the watershed, or rather being transferred between farms within the watershed. Participants thought there was some litter that was staying within the watershed, but that quite a bit is being transferred out. The group reviewed estimates for fertilizer application rates and was in agreement with the estimates that DEQ presented. One participant noted that it would be interesting to see slope data for the watershed since liquid dairy manure tends to move downslope more rapidly than poultry litter, meaning that more ends up in the stream in comparison.

The group discussed how MS4 permits will be addressed in the new TMDL. The standard approach to date when there are multiple, often overlapping, MS4 permits in a watershed has been to lump the MS4 load together in the wasteload allocation. While the loads from each MS4 area are modeled separately to improve accuracy, the overall load is lumped. With this approach, permittees are asked to identify and address their portion of the load in the associated TMDL action plan that they develop. Permittees expressed concerns about the level of coordination that would be required should their loads be lumped together in the TMDL. One participant asked whether each permit holder would do an action plan of their own, or if one would be submitted cooperatively. Each MS4 permittee would be expected to do an action plan to address the local TMDL. DEQ would expect some degree of coordination between partners with respect to how they determine their portion of the load, but permittees would work independently on their action plans. The group agreed that more time and discussion is needed before a decision can be made to lump or split MS4 permits in the wasteload allocation. The topic will be revisited at the next TAC meeting. In the meantime, Nesha offered to send out DEQ guidance on action plan development when the MS4 load is aggregated.

Construction stormwater permits will be included in the modified TMDLs. Determining the number of acres covered under these permits is challenging because the number of permitted acres is not necessarily the number of disturbed acres at any given point in time. The group discussed various options with respect to using permit data to estimate land disturbing activities. Typically, a year long construction project may only be disturbed for a couple of months. Nesha suggested looking at the acres of land disturbance and the length that each permit is open, taking an annual average and then taking 25% of that acreage to list as disturbed acres. Participants thought that this approach made sense.

The group discussed how existing BMPs would be credited in the TMDLs. Participants thought that quite a bit of the voluntary fencing that was put in place in the Cooks Creek watershed several years ago is still in place. This type of fencing is easier to maintain and makes sense to farmers from an operational standpoint. Therefore, they are more likely to leave it up. Representatives from the Shenandoah Valley SWCD offered to share voluntary BMP tracking data with DEQ to compare their results with what was reported in Cooks Creek. NRCS agreed to provide BMP data for any practices that they have 5 or more of on record for the watersheds. A representative from JMU noted that most of the BMPs shown in the table on their property were installed as part of construction projects to offset/treat additional stormwater pollution. Consequently, these BMPs cannot be counted in TMDL development. They have reported all of the additional BMPs that were installed to help meet Chesapeake Bay TMDL goals in their Bay Action Plan, which has been submitted to DEQ. These BMPs can be used as credit in the modified TMDL.

Nesha asked the group whether they would prefer to meet as a larger group for future TAC meetings, or to divide into agricultural and urban committees. Participants agreed that they would prefer to meet together going forward so that they understood all sides of the issues in the watersheds. The next TAC meeting should be held within a month. The group agreed that daytime meetings worked best and that the Valley Regional Office was a good meeting location.