

Blacks Run and Cooks Creek TMDL TAC Meeting

October 4, 2017

DEQ Valley Regional Office

Attendees

John Reeves	John Ware	Megan Croushorn
Nathan Blackwell	Rebecca Stimson	Lisa Perry
Megan O’Gorek	Nesha McRae	Tom Hartman
Robert Brent	Tara Sieber	Dale Chestnut
Kelley Junco	Emily Riggleman	
Katie Shoemaker	Megen Dalton	
Lisa Perry	Kelly Ramsey	

Meeting Summary

Nesha McRae (DEQ) welcomed attendees and began the meeting with a recap of how MS4 permits will be handled in the modified TMDL. Based on input from the last meeting, the MS4 wasteload allocations (WLAs) will be disaggregated, with each MS4 receiving an individual sediment and phosphorous WLA. Nesha also provided a summary of how VSMP permitted acreage will be treated in the TMDL. In order to estimate current conditions in the watershed, 40% of existing permitted acreage was used to determine the pollutant loads. This is based on input from the committee during previous meetings. The sediment load from this land use was then reduced by 65% to account for erosion and sediment control practices, which were estimated to be functioning slightly below what would be expected at full compliance (85% reduction in sediment). In order to develop the WLA for VSMP acreage, the total current permitted acreage was used to determine pollutant loads. This is based on the typical approach that is used when accounting for permitted sources in the watershed with the idea that the WLA should reflect total permitted acreage in order to be consistent with current permitting practices. A goal of full compliance with E&S regulations was used in developing the TMDL allocation, meaning that sediment loads were then reduced by 85%. Nesha asked the group for their feedback on this approach. One participant asked why, if you are already regulating construction, you would push those individuals to do even more. He noted that it did not seem fair to ask the regulated community to do more when they are already doing quite a bit, and that you are saddling them with an extra financial burden. Nesha explained that the point of using the 85% reduction rate was not to suggest that they need to do more than they are required to, but rather to encourage that they fully comply with what they are required to do. Another participant asked whether the expert panel that developed the 85% reduction rate for E&S practices assume some rate of non-compliance? Nesha offered to follow up on this with additional information from the expert panel report. *Following the meeting, the expert panel guidance was reviewed. A level of functional deficiency was assumed in calculating the 85% sediment reduction. In addition, Level 2 E&S controls were assumed in the calculation, with Level 2 reflecting general compliance with ESC requirements adopted by localities in the Bay watershed over the past several years.* Nesha asked the group if anyone was aware of research demonstrating phosphorous reductions from E&S measures, and noted that currently the TMDL includes no phosphorous reductions from VSMP permitted acreage. Nobody was aware of any data on this topic.

The group moved on to discuss changes in phosphorous loading rates from low till cropland in the watersheds. Robert Brent explained that after the last meeting, it was noted that the loading rate for phosphorous from low till cropland was higher than the rate from high till cropland. Consequently, loading rates from low till were adjusted to reflect three different tillage categories using recommendations from a Chesapeake Bay Expert Panel as a reference for the modification. SWCD and NRCS staff provided input on tillage practices in the watersheds in order to identify the correct proportion of each tillage type. High till loads were left the same since they were comparable to rates utilized in the Chesapeake Bay Model. This modification to low till cropland is consistent with the Chesapeake Bay TMDL model.

The group discussed the process that is being used to credit existing best management practices (BMPs) in the modified TMDL. Neshia provided a recap of this process from the last meeting, explaining that sediment BMPs installed before 1/1/2009 and phosphorus BMPs installed before 12/31/2016 were included as a part of existing conditions. BMPs installed after those dates are credited in the allocation scenarios as progress in meeting the TMDL. Neshia suggested that MS4 permittees discuss how best to receive phosphorous credit for BMPs installed prior to 2016 with MS4 program staff. The current guidance for development of Local TMDL Action Plans leaves permittees with quite a bit of flexibility with respect to how they will address local TMDLs.

A participant asked whether the reductions associated with JMU's BMPs have been well documented. It was explained that the reductions are based on widely accepted BMP efficiencies and associated calculation methods, but that these are estimates rather than actual measurements. Another participant asked why BMP reductions aren't shown for all of the sources in the watersheds (e.g. VDOT MS4, construction permits, other permits). For permitted loads, we wouldn't expect to see reductions since they are operating in compliance with their permit with respect to discharge rates. Other sources including MS4s reported BMP data to DEQ, so if there are no reductions shown, no BMPs were reported. It was noted that numbers presented to the public should not have decimal points and should probably be rounded even further.

Robert discussed other minor changes to loading estimates since the last TAC meeting including revisions to loads coming from the landfill to include reductions from BMPs. The group moved on to discuss estimates of existing loads in the watershed and changes to loads from different sources. A participant asked why there were only two cropland types included in the categories in the table since three types of low till were assigned pollutant loading rates. The three types of low till are all summarized under the one low till category in order to stay consistent with the VGIN land use categories. Another participant expressed concern over the fact that the developed impervious load is set at nearly 10 pounds/acre. The VA Runoff Reduction method spreadsheet uses something in the neighborhood of 1 lb/acre phosphorous for developed impervious acreage (though values may go higher than this). Neshia offered to follow up on this issue and get back to the group on a revised loading rate. A participant asked how much room for editing there is with respect to estimates of loading rates for the different land uses. Robert explained that these estimates can be revised if concerns are raised and appropriate reference materials can be cited. The City of Harrisonburg and JMU both expressed concerns about the total acreage listed within their MS4 area. Dale Chestnut (JMU) noted that their calculations have their regulated acreage at 631.59 rather than the 710 acres listed in the handout. Rebecca Shoemaker (EE Consulting) offered to follow up on this.

A representative from the City of Harrisonburg asked about doing BMPs outside of the regulated area within the watershed. He explained that having to implement BMPs only in the regulated area within the Blacks Run watershed severely limits what the city can do to achieve these very high reductions. This portion of the city is largely developed with very few opportunities for additional stormwater management practices. He also expressed concern about meeting pollutant reduction goals outside of the regulated area due to the fact that we are relying on voluntary adoption of BMPs. Nesha responded that there are programs such as VCAP and grant programs that work to provide incentives to homeowners to implement BMPs on a voluntary basis. It was noted that MS4s cannot receive credit for BMPs done outside of the TMDL watershed in their Local TMDL Action Plan, though they can get credit for them in their Bay TMDL Action Plan. While the two efforts do have some areas of overlap, additional efforts are required by the Blacks Run TMDL. One participant asked about the change in the targeted reductions for sediment and phosphorous since 2002. It was explained that land use has changed since then in the watershed, and that additional permits to discharge sediment and phosphorous have been issued since then. This has resulted in an increase in the pollutant reductions called for in the TMDL. Another participant asked whether there is a role that nutrient trading can play in accomplishing pollutant reductions and noted that this would be a good way to provide incentives for BMP implementation. It was agreed that this is a great tool in improving water quality, but that the TMDL will not be prescriptive with respect to meeting pollutant reduction goals. This is typically addressed during the development of TMDL implementation plans.

The group moved on to discuss a series of allocation scenarios. Nesha explained that the interim scenario does not meet TMDL reduction goals, but rather is intended to demonstrate how far accomplishment of Chesapeake Bay TMDL reduction goals would bring stakeholders with respect to meeting local TMDL goals. One participant stated that Scenario 1 seemed fair (it included equal reductions from all sources in the watershed). Nesha asked the group for their feedback on this scenario and it was noted that it would be challenging to get pollutant reductions from land uses like forest and wetlands. While we could enhance the pollutant filtering capacity of wetlands and forests, it is unlikely that this would happen. It was noted that there is a wetland restoration BMP offered through federal programs that can be used to address degraded wetlands. The suggestion was made to zero out reduction goals for forest, trees, shrub and wetland land uses with respect to sediment reductions, and then modify the scenario accordingly. All of the other sources could be set at the same reduction level to maintain fairness. One participant asked whether these goals could actually be accomplished, and whether they would be met if the watershed was largely forested. Robert responded that they would most likely be exceeded if the watershed was largely forested, but that of course, that is not the expectation of the TMDL. A participant noted that the goals did not seem realistic to him. It was agreed that the goals shown in the tables are extremely high, and that they would prove very challenging to meet. It was also noted that TMDLs are a process used to clean up streams, and that the end goal of this process is improved water quality. Progress in meeting this goal will be assessed by water quality monitoring, not by percent reductions. In addition, the local community may decide on a different goal or endpoint based on what they feel can be accomplished. The TMDL will not include a timeline, so stakeholders will be able to move at a pace that they feel is appropriate based on the goals. One participant asked how were reduction goals established. Robert explained the TMDL development process and how watershed models were used to develop pollutant loads. Another participant asked if we had any idea of the cost of implementing the proposed scenarios. Nesha explained that the TMDL will not include BMPs to accomplish the reductions or associated costs. That is typically done during the

TMDL implementation planning phase of the overall TMDL process. The group agreed that the costs would be very high, particularly for urban sources.

Nesha asked the group to raise their hand if they were in support of modifying scenario 1 for sediment and including it in the TMDL. The group was in agreement to support this approach. A similar approach was decided on for phosphorous reductions, with groundwater also zeroed out.

Nesha explained that the next step in the TMDL development process will be to complete a draft of the TMDL and then hold a public meeting. The time frame for the public meeting is early to mid November, with completion of a draft TMDL in late October. Nesha asked the group for suggestions as to a good place for a meeting. Westover Park and the county office building were both suggested. The city has had good luck holding open houses from 5-7 p.m. One participant suggested 5:30 as a good starting time. Another participant asked about the structure of the meeting. Nesha explained that DEQ would give a presentation, and that they could consider inviting other guest speakers and displayers at the event. This could make it more appealing to the general public. One participant suggested approaching City Council at their next meeting in order to provide them with some background information about this effort. Representatives from the city offered to follow up on this.

One participant expressed a concern about opportunities for stream restoration in MS4 regulated areas. He explained that it would be very difficult to use this practice to meet the TMDL WLA since the stream is essentially the boundary of the MS4 area. Robert responded that he thought it would be unlikely that this practice could not be credited towards meeting TMDL goals including the WLA. This benefits of this practice with respect to the regulated area could be credited based on the drainage area for the stream segment restored. It would make the most sense to work lower in the watershed to maximize the credit based on the area treated with respect to the regulated area.

Nesha thanked the group for their participation and noted a series of items that DEQ and their contractors would follow up on with participants including: MS4 regulated area acreages, loading rates for urban impervious acreage, a final modified scenario, and more details on the basis of the 85% sediment load reduction estimate for E&S practices from the expert panel.