

## Woods Creek TMDL Implementation Plan: Residential & Urban Working Group Meeting #2

Natural Bridge Soil & Water Conservation District Office

December 11, 2018

### Participants

Sandra Stuart  
Melissa Alexander

Kip Brooks  
Chuck Smith

Karen Kline  
Sara Bottenfield (DEQ)

Nesha McRae (DEQ)

### Meeting Summary

Sara Bottenfield briefly summarized the group's first meeting for the participants who were not able to attend. A representative from the Rockbridge County PSA shared some information related to the discussion about potential sewer connections in the County. Currently, the agreement between the PSA and City of Lexington allows sewer connections only for new construction in certain subdivisions. Connection to public water is required when connecting to sewer, but water lines are more widespread than sewer; of the PSA's approximately 2,400 customers, about 1,000 have sewer connections and the remainder have water only.

Karen Kline provided a handout with information on potential BMP implementation scenarios to meet bacteria reductions needed for both Stage 1 (Delisting) and Stage 2 (TMDL) goals. She explained that the reduction goals for Stage 1 would be sufficient to remove Woods Creek from the impaired waters list, while the Stage 2 goals would meet a more stringent water quality standard. The Stage 1 reduction from Residential Land sources has been reduced to 10% due to a correction of the model. Karen reviewed the list of potential BMPs and explained that the associated costs are estimated using data from other projects and tools such as CAST. The group felt that most costs appeared reasonable. The estimate includes two full-time staff but participants felt that due to the small size of the watershed, one staff person would probably be a more reasonable assumption.

The group moved on to discuss potential septic BMPs. Woods Creek has a relatively low number of septic systems, with an estimate of eight failing systems and zero straight pipes. Participants felt that a septic pumpout program would probably be successful. Karen noted that the estimate of 57 pumpouts represents one third of the total systems in the watershed. The group thought that was a reasonable expectation for participation. Most homeowners get a pumpout when they are selling the property or have a noticeable problem, but offering cost share for pumpouts provides an opportunity to detect problems earlier and also to educate residents on water quality concerns and septic maintenance needs. State programs for septic cost share typically offer 50% cost share for pumpouts, with eligibility for a greater percentage depending on income. Participants felt that there would likely be a demand for income-based higher cost share rates in the watershed. For the estimated eight failing systems, Karen assumed that half would require a repair and half would need replacement. A more accurate estimate of likely repairs vs. replacement can hopefully be obtained from VDH.

Karen reviewed the proposed BMPs to address pet waste. The estimated number of pets in the watershed is based on veterinary and pet industry surveys that have found an average of one pet per household. One participant suggested that more pet waste stations on the Woods Creek trail would be

helpful, and perhaps a station at Washington & Lee since they have an environmental focus. A participant at the first Urban & Residential Working Group meeting offered to look into this possibility. The attendees were aware of several pet waste stations along the Woods Creek trail and three or four more in the downtown area, and felt that the addition of the five proposed stations would be sufficient coverage. Karen and DEQ staff explained what the pet waste digesters are and how they function. Since they do require maintenance to work properly, the group felt that 13 was a reasonable number to include in the plan. The education efforts proposed for Stage 1 will likely overlap with installation of the other BMPs. A participant at the Working Group's first meeting followed up on a suggestion for educational outreach by checking with the City Treasurer about including a flyer with dog license renewal mailings and was told that would be allowed.

The final category of proposed BMPs are focused on urban stormwater. Bioretention filters/raingardens and buffers can be expensive and hard to site, so they are proposed for Stage 2 while Stage 1 will focus on septic BMPs. One participant has had inquiries from multiple landowners about buffers, which would total more than the one acre proposed. A participant asked whether streambank restoration would be considered a component of buffer practices. Karen and DEQ staff replied that, within the context of the Implementation Plan, it would not be included because it does not provide bacteria reduction. There was some discussion of potential obstacles to buffer installation in an urban setting; the city has a grass height ordinance and depending on the buffer width needed, landowners may not want to give up a significant amount of their yard/property. DEQ staff noted that example ordinances to accommodate buffers and other landscaping for water quality are available online. Participants were aware of existing raingardens in some newer developments, but thought there might be opportunities for additional stormwater management BMPs in other areas. The city is initiating a wastewater study that will include mapping impervious surfaces. The potential raingardens would be residential-scale, likely treating about half an acre. DEQ staff thought that the estimated cost would likely be higher than what is proposed, closer to \$10,000/acre. There was some discussion of the cost-effectiveness of stormwater practices compared to some of the other, less expensive, proposed practices. Participants agreed that it was beneficial to include a range of BMPs since there are many factors that determine what will be most effective.

The group discussed how the proposed BMPs could be funded and the restrictions that might affect implementation. DEQ staff explained that for projects funded with DEQ grants, there is typically some flexibility in moving funds between different types of practices.

Sara thanked the group for their time and attendance, and explained that the Working Groups will no longer meet separately but will transition to a combined Steering Committee. The Steering Committee will likely meet in late January or early February to provide input on a draft of the Implementation Plan.