

Woods Creek TMDL Implementation Plan: Residential & Urban Working Group Meeting #1  
Natural Bridge Soil & Water Conservation District Office  
November 7, 2018

**Participants**

Sandra Stuart	Kip Brooks	Lee Cummings (NBSWCD)	Arne Glaeser
Jeff Martone	Karen Kline (VT-BSE)	Nesha McRae (DEQ)	Sara Bottenfield (DEQ)

**Meeting Summary**

Sara Bottenfield reviewed the goals and purpose of the working group and this meeting and asked Karen Kline to explain in more detail how the information provided by the group will be used. Karen noted that the Woods Creek TMDL calls for a 100% reduction from human sources of bacteria (septic and sewer) and a 25% reduction from other residential sources, primarily pet waste. The BMPs that will be discussed by the group each have an effectiveness rate that will be applied to the bacteria load to meet the reduction goals.

Sara referred the group to the provided handout, including a watershed map showing the location of sewer lines and a table of estimated quantities of urban and residential bacteria sources. During TMDL development, it was agreed that there are most likely no straight pipes in the watershed. A participant noted that there have been sewer overflows near Woods Creek from at least two locations. City of Lexington representatives stated that they have bolted manhole lids in those locations and installed vents, and that a capital improvement project (Woods Creek Interceptor Study) is in the works to upsize sewer lines which should provide a more permanent solution. The planning phase of the project is nearly complete and work is expected to begin in Spring 2019. The city is also working on the Phase 2 Infield Sewer Shed project, lining pipes and making repairs to offset pipe joints along Lime Kiln Road. A participant noted that volunteer monitoring of Sunnyside and Barbeque Creeks has found consistently high levels of E. coli, and asked whether any of the concerns identified by the city could be a contributing factor. City representatives replied that there is always a chance, but based on their video inspections in that area it is unlikely.

The estimated number of septic systems in the Woods Creek watershed is fairly low. Sara asked NBSWCD representatives about the response to their septic cost share program in an adjacent watershed (Buffalo Creek). They have had very little interest despite significant outreach efforts. The group agreed that there are some alternative systems in the watershed but most are conventional. The city has found that the highest rate of I&I was from the Infield sewer shed, with a peak factor of 10. Within the city limits there are no opportunities for connection to public sewer – only one septic system exists in the city and it is at a house that has been abandoned for years. There may be opportunities for sewer connection in the County, but those lines are overseen by the Rockbridge PSA. Sara reached out to the PSA prior to this meeting but hadn't yet received a response. Sara asked the group if they thought there would be interest in a septic pumpout program in Woods Creek. Participants asked whether septic programs in other watersheds have resulted in significant water quality improvements. DEQ staff responded that E. coli contributions from septic systems are typically much smaller than contributions from livestock, but that E. coli from human sources presents a greater health risk. A participant asked about sending a mailing to owners of septic systems in the watershed, since the health department should have a list of permitted systems and contact information. Another participant responded that the

local health department does not have electronic records, which makes it more difficult to gather that kind of information. Sara noted that septic programs in other watersheds have reached out to the septic contractors to spread the word about cost share. The group briefly discussed some areas where a pumpout program might be most effective. There are a number of septic systems in the Country Club area and near the Mormon Church, but most of those homes are fairly new. Some of the houses in the Cedar Grove development have been there a while. DEQ staff suggested that the county GIS could be a way to identify properties likely to have septic systems, if the information isn't available from the health department. However, it would still be very helpful to have information from the health department, particularly on the percentage of system repairs/replacements expected to need alternative systems, due to the much higher cost. A participant offered to follow up with health department staff.

The group moved on to discuss management of pet waste in the watershed. Previous discussions have indicated that pet waste stations are installed at several locations in the watershed, and the possibility of a dog park had been mentioned. A city representative reported that the dog park is likely to become a reality, as a petition in favor of the park recently received over 900 signatures. The dog park was originally proposed to be close to Woods Creek near Waddell Elementary but that location was not pursued and the other locations under consideration are farther away from streams. Currently there are pet waste stations near Waddell, near the BBQ restaurant, and at Jordan's Point park. A participant wondered whether Lexington has a pet waste ordinance and if not, whether it would be worthwhile. Enforcement would probably be lax, but it might have some educational value. Several participants knew of apartment complexes and residential developments where residents must submit their dogs' DNA samples so that if waste isn't picked up, the culprit can be identified. DEQ staff noted that if bacteria from pet waste can't be eliminated by encouraging/requiring owners to clean up after their pets, the group may want to consider retention structures that would address bacteria in runoff. Other ideas for outreach included temporary/step-in signs in park areas, perhaps with student involvement, and a pamphlet or flyer that could be distributed with dog licenses. Public Works maintains the existing pet waste stations, so feasibility of additional stations would need to take their budget and work plan into consideration. The group felt it was unlikely that maintenance of the stations could be accomplished with volunteers. A participant observed that pet waste concerns might tie in with the sustainability program at W&L and/or the Rockbridge Area Outdoor Plan signage component, and will look into those possibilities.

DEQ staff pointed out that Lexington does not have an MS4 permit, so grant funding could be used towards stormwater retrofit practices to address existing sources of bacteria. Past experience with septic programs suggests that septic efforts will not be enough to fully meet reductions, so stormwater practices that could be implemented by the city could be a way to achieve additional reductions. It is possible that Lexington could initiate a major stormwater project in 5-10 years, which would create an issue with the lifespan of any BMPs installed in the near future. Perhaps smaller BMPs to address specific concerns would be more practical. DEQ staff noted that these BMPs could have an educational component as well. A NBSWCD representative mentioned that many of those types of BMPs would be eligible under the VCAP program. A participant asked about urban riparian buffers and streambank restoration. Buffers could be included in the IP, but streambank restoration does not have a bacteria reduction efficiency and therefore would not be eligible.

Sara proposed the next meeting for the week of December 10 and asked about preferred meeting times. Participants agreed that afternoons worked well. Sara thanked the group for their input and the meeting was adjourned.