

Stony Creek, Pughs Run and Crooked Run Clean Up Study 1st Public Meeting

Shenandoah County Public Library, Edinburg VA

June 18, 2024

Attendees

Vito Gentile	Michael French	Janet Herring
Tara Wyrick (DEQ)	Mary Gessner	Nesha McRae (DEQ)
Suzanne and Kevin Funkhouser	Mark and Kate Hawkins	Hilde Knupp
Steve French	Manfred Locher	Gene Taylor
Stephen Livesay	Laura Bennett	Eric and Amber Reiley
Sheila Cleary	Kara Balcervak	Darrell Cook
Samual Groseclose	Keith Koerpy	Dana Gochneour
Sallie Raynor	JW Lambert	Cody Barb
Rob Arner	Justin Bridges	Bruce McClinton
Rich Church	Josh Turner	Bonnie Barrick
Phil and Ellie Daley	Joan Comanor	Betty Ayers
Patrick Felling	Jeff Dalka	Barry Shaffer
Wayne Webb	Jay Hafner	Aaron Bushorg
Michelle Robinson	Jason Bushong	

Meeting Summary

The meeting began with a welcome from Nesha McRae (Virginia Department of Environmental Quality, Valley Regional Office). Nesha gave a presentation on the clean up study, also known as a Total Maximum Daily Load (TMDL), the will be developed for Crooked Run, Stony Creek and Pughs Run. She shared a map of the three watersheds included in the project area and reviewed biological monitoring data collected from the streams by DEQ Regional Biologists. Nesha explained the aquatic life use designation that Virginia's waterways must meet and described how attainment of this designated use is determined. Sediment has been identified as the primary pollutant responsible for the impairment of this use in Crooked Run, Stony Creek and Pughs Run, as is described in a Benthic Stressor Analysis that has been completed for the creeks. A sediment TMDL will be completed to address excess sediment in these streams. Nesha described the process used to develop TMDLs and encouraged community members to remain involved in this effort. Once the presentation was concluded, Nesha opened the floor for questions.

The first question was asking about whether erosion was causing the sediment to enter the streams. Nesha responded that streambank erosion was one of the sources of sediment in the streams, as is runoff of sediment from land uses in the watersheds. Part of the TMDL process will be to develop estimates of the extent of sediment coming from different sources for each stream.

An attendee wanted to know about the influence of surface water versus groundwater in these streams and watersheds. Nesha explained that most of the sediment in the streams is coming from surface runoff and streambank erosion. Groundwater is a greater source of nitrogen and dissolved ions.

A question about climate change influences was raised. Nesha explained that climate change would be expected to have a greater impact on urban streams that receive higher velocities of runoff due to the

extent of pavement in these watersheds. Much of the floodplains in urban streams have also been disconnected from the stream and/or paved over, making streambank erosion and scouring more common during periods of high flows. This may also be observed more frequently in non-urban streams as more intense storms and concentrated precipitation occur with climate change.

An attendee wanted to know about monitoring *E. coli* bacteria in these watersheds. Nesha explained that bacteria was not impacting aquatic life in these streams and that this project would be focusing on stream health.

Nesha responded to a question about Spring and Fall benthic monitoring by describing the biological monitoring program and explaining that Spring and Fall are the periods of highest biological productivity.

Nesha also promised to look into the location of Columbia Furnace in comparison to the location of the monitoring stations on Stony Creek, circling back with an individual after the meeting to share monitoring station location descriptions.

An attendee asked about why total suspended solids (TSS) was not measured in these streams and whether there were other ways of understanding the percentage of sediment from bank erosion versus overland runoff. Nesha explained that part of the TMDL process would include estimating the proportion of sediment coming from different sources of sediment in the watersheds. DEQ does not routinely monitor TSS.

The question about how the removal of the Little Stony Creek dam will impact downstream water quality. This process is underly under consideration by the Town of Edinburg. Nesha agreed that it would be important to account for the potential influx of sediment into Stony Creek that may occur when the dam is removed.

The impact of beavers on water quality in these streams was asked. Nesha responded that the group would be looking at that more in depth.

An attendee asked for more description on the Virginia Stream Condition Index (VSCI) scores and how these were determined. Nesha described the process, which includes natural conditions. She explained that the metrics used to determine whether a stream is supporting the aquatic life use designation are supported with a wealth of data collected from Virginia's streams.

A concern about singling out agricultural landowners was voiced and Nesha reassured attendees that the group working on understanding sediment sources would be looking at the watersheds as a whole, not at individual properties. She also explained that participation in clean up efforts through the implementation of best management practices (BMPs) would be voluntary.

An individual offered to allow additional access to the streams along their process if requested. Nesha explained that biological and chemical monitoring to support the study had been completed, and that at this point, we are focusing on data analyses.

Another question that was raised was regarding examples of possible residential Best Management Practices which could be considered. Nesha shared several examples such as stream side buffers, letting grass grow next to streams, bioretention filters and other stormwater management practices.

Nesha thanked participants for attending and noted that she will be reaching out with a date, time and location for the next meeting, which will be more discussion based in order to collect input on watershed characteristics for the study.