

**James River Watershed TMDL Study for Benthic Impairments on Deep Run,  
Dover Creek, Jordans Branch, North Run, Stony Run, Stony Run UT, and Upham  
Brook Located in Henrico and Goochland Counties**

**DEQ TMDL PUBLIC MEETING #1**

May 2, 2023 - 6:00 PM  
DEQ-PRO  
4949-A Cox Rd.  
Glen Allen, VA 23060

Attendees: 16

Amanda DuBour – DOF  
Ashley Hall - Stantec on behalf of VDOT  
Denise Moyer – DEQ  
James Beckley – Resident  
Jennifer Palmore – DEQ  
Kaitlin King – DEQ  
Katie Shoemaker – WSSI, contracted by DEQ (attended by phone)  
Keith Burgess – Monacan SWCD  
Kelley West – DEQ  
Madison Whitehurst – DEQ  
Rob Breeding – DEQ  
Robin Wilder – Henrico County  
Stacey Sovick – Resident  
Stephen Dombroski – WSSI, contracted by DEQ (attended by phone)  
Tom Dunlap – JRA  
Tony Cario – DEQ

**Introductions**

Staff members and project partners introduced.

**Overview**

Lineup for the meeting.

Poll Question- have you ever been a part of a watershed TMDL? (1) no=two people, (2) vaguely familiar=three people, (3) somewhat familiar=three people.

Clean Water Act overview on WQS and listing of impaired waters

WQS Designated Uses overview

Why do we need this TMDL study? Aquatic Life Use impairment based on monitoring of aquatic macroinvertebrates.

Why should we care about bugs? Nutrient cycling, aquatic food chain, health of our nation's waters from the headwaters to the oceans.

### **DEQ's Process for Identifying & Addressing Impaired Streams**

The Water Wheel – The process starts with Water Quality Standards. Discussed water quality monitoring and the types of programs DEQ has for monitoring. This TMDL study focuses on aquatic life and biological monitoring. DEQ Biologists collect the data and then the Assessment staff evaluate the data against the Water Quality Standards. These assessed streams are listed in the 305(b)/303(d) Integrated Report. The 303(d) impaired waters are then referred to the TMDL program. It wraps up through implementation planning.

Further detail was discussed about aquatic life use impairments. VSCI target scores and sensitivities were talked about.

Definition of TMDL, TMDL watershed equation, TMDL endpoint.

Questions: No questions were posed during the first section.

### **Watershed study areas described for the entire project**

Poll Question: What is your interest in this project? (1) Live in area=three people, (2) work for facility in watershed=three, (3) work for facility in area with permit=two, (4) visit for recreation=zero, (5) Just interested=one.

Poll question: Which watershed are you interested in? (1) Watershed1=one person, (2) Watershed2=three, (3) Watershed3=three, (4) Just want to learn more about the process=three.

Watershed Map with Monitoring station overlay with parameters sampled shown.

Details for each watershed (Dover Creek, Deep Run, Stony Run, UT to Stony Run, Upham Brook, Jordans Branch, and North Run), sampling station locations, and impairment areas were shown and VSCI scores presented.

Questions? None at this point in the presentation

### **The TMDL Study Process**

DEQ to perform a stressor analysis to determine the cause of the impairments. Discussed details of what data and factors go into stressor analysis. The output of the stressor analysis list non-stressors, possible stressors, and probable stressors. These will be discussed in detail at the next meeting.

Breakdown of the TMDL equation and graphics to show the equation.

How can you participate and get involved? Provide feedback about the watersheds, and comments about the TMDL process and results of the TMDL study.

### **What's next?**

Community Engagement Meeting- (Tentative Date) Monday July 10, 2023, 2-4 PM in the DEQ-PRO Office

Community Engagement Meeting or Technical Advisory Group- Difference between the two was discussed.

Project Timeline was shown, project starting 5/2/2023 and ending Summer 2024.

**Questions:**

1. What kind of public comments are you looking for? *You are welcome to provide any information about the watersheds and we can use that as model inputs. For example, we look at land use. DOF noticed 3-4 areas that have been logged which could change land use. It would be a good QA/QC for the land use data we use. TMDLs serve as a regulation, and we are required to have public involvement so if any concerns about proceeding with the TMDL or specific request for the TAG all could be provided.*
2. In all three watersheds. The spring values were slightly lower than the fall scores. Is that normal? *It could be the normal cycle or the invertebrates could have already emerged or it could be an environmental factor such as washout, scouring, road salts. Hopefully the stressor analysis can provide more insight as to why spring scores appear to be lower than the fall scores.*
4. Are any of the water monitoring stations shown on the map non-agency stations? *Most were DEQ collected data from our database but citizen data that is of the correct level will be also input into the modeling.*
5. Dover Creek data was collected in 2017-2018, was that data the only data we have for this project within the watershed? *We do have other water quality parameters, but that is all of the biological data that we have collected. Keith will submit comments about his concerns with that.*
6. Some of these stations were only collected once, will the biologist be going out any more to collect data or are we done? *At this point we are probably done, since benthics represent a long period of time. Unless we are determined that we have a data deficiency we do not plan to sample any more due to time constraints in the project.*
7. Is it a certainty that DEQ will do an Implementation Plan (IP)? *IP staff said it depends on interest in the watershed; we aim to start the IP directly after the TMDL if interest is there.*
8. Will all of these watersheds be included in one IP? *Yes, probably one IP.*
9. Comment that land use in Goochland watershed is different from the other watersheds. *Yes, the Goochland watershed is not as urbanized as the other two watersheds.*
10. Anything they can look at or review in advance before the next meeting? *Dr. Brent will be performing the stressor analysis and will present that information at the next meeting. The draft stressor analysis can be sent out ahead of the next meeting for review.*