

# **Broad Run Watershed Benthic Total Maximum Daily Load (TMDL) Study**

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## **First Public Meeting**

February 27, 2025

Meeting Summary

**Location:** Sterling Library (22330 S. Sterling Blvd, Suite A117), Meeting Rooms A and B

**Start:** 6:30 P.M.

**End:** 8:00 P.M.

### **Meeting Attendance:**

#### Project Team:

Amanda Thompson, Virginia Department of Environmental Quality (DEQ)

Sarah Sivers, DEQ

Gwendolin Mccrea, DEQ

Heidi Moltz, Interstate Commission of the Potomac River Basin (ICPRB)

Carlington Wallace, ICPRB

Stephanie Nummer, ICPRB

#### Attendees:

Chris Stone, Loudoun County DGS

Kelly Grantz, GKY & Associates

Jamie Fultz, Loudoun County DGS

Traci McAllister, Stantec

Martin Hurd, Fairfax County

Ed Umbrell, Dewberry

Gem Bingol, Piedmont Environmental Council

Jennifer Crane, Broadlands HOA

Avis Renshaw, Virginia Farm Bureau

Bradley Schmitz, Loudoun Water

Emily Italiano, Loudoun Wildlife Conservancy

Rima Feghaly, Loudoun Wildlife Conservancy

Rachel Mai, Loudoun County Board of Supervisors

### **Meeting Materials:**

The meeting was conducted with the assistance of a MS PowerPoint presentation. Detailed information in the presentation is not repeated in these summary notes; instead, highlights from

each general topic section of the meeting are summarized along with the questions and discussion held during the meeting.

### **Meeting Summary:**

Amanda Thompson, DEQ introduced DEQ staff and contractors in attendance, then provided an overview of the meeting agenda and objectives:

1. Provide an introductory overview of DEQ's water quality planning process and Total Maximum Daily Load (TMDL) studies
2. Outline the water quality impairment identified in the Broad Run watershed
3. Discuss Broad Run watershed characterization progress
4. Provide an overview of the TMDL study timeline for Broad Run and next steps

### **1. Provide an introductory overview of DEQ's water quality planning process and Total Maximum Daily Load (TMDL) studies**

Ms. Thompson provided the background of Water Quality Standards, explaining the Clean Water Act Section 303 designated uses for all Virginia state waters, numeric and narrative criteria, and anti-degradation policies.

Ms. Thompson provided an overview of Virginia's Continuing Planning Process to achieve state water quality standards, how the benthic macroinvertebrate community is monitored to evaluate the Aquatic Life designated use, and how benthic stressor analysis is performed.

- Question 1: How often/why kinds of monitoring are occurring?
  - Answer: There are approximately 30 sites per year, rotating around the region, as well as ambient sampling at trend sites, watershed stations, and probabilistic sites selected at random. The Annual Monitoring Plan published on the DEQ website outlines the plan for the year, and that is made available for public comment.
- Question 2: Is there follow-up monitoring once a plan is developed?
  - Answer: DEQ tries to return to impaired waters to review. Implementation plans are a separate process focused on nonpoint sources. Monitoring is focused there after plans have been implemented. Waste load allocations are focused on permitted sources, and follow-up there is based on the permit limits and requirements.
- Question 3: Can there be further discussion on the requirements of an implementation plan at a later point?
  - Yes
- Question 4: How long does the TMDL/cleanup study process take?
  - Answer: 1.5 to 2 years

Ms. Thompson then explained the components of a TMDL (Waste Load Allocation, Load Allocation, Margin of Safety, TMDL threshold) and the TMDL development process.

- Question 5: How is the margin of safety calculated?
  - Answer: Explanation of implicit margins in the model assumptions and/or explicit margins added on to account for uncertainty not addressed elsewhere. The margin of error is also presented for feedback and discussed in the stakeholder groups. Future growth is also discussed in the stakeholder groups, as future growth is expected to be significant for Broad Run.

## **2. Outline the water quality impairment identified in the Broad Run watershed**

Ms. Thompson introduced the water quality impairment in Broad Run with maps of the project location, monitoring stations, and the stream segments with identified benthic impairments. These maps also included a portion of the Potomac-Seldon Island watershed with a stream segment with a bacterial impairment; this section will be added to the project if a bacterial impairment solution for Broad Run is pursued.

Ms. Thompson provided further detail on the monitoring data collected for the Broad Run TMDL study, and requested stakeholders share any other data or information to help improve the accurateness of the information used in the study.

- Question 6: Are you analyzing chloride?
  - Answer: Yes
- Question 7: Is any citizen science data included in the analysis?
  - Answer: Not at this point, only DEQ monitoring data. However, citizen science data is welcomed, and further analysis will determine if it can be included in the final model.

Ms. Thompson explained VSCI scores indicating an impairment (below 60) and moved through line graphs displaying the VSCI scores of the benthic stations monitoring within the watershed.

- Question 8: The data suggests impairment for 20 years, is there any archival data that could tell us what was in the watershed before?
  - Answer: DEQ is not aware of any data sets older than 20 years but would be interested in it if any stakeholders have data.
- Question 9: For the Horsepen Run sub-watershed, is Dulles International Airport (Dulles) as a possible point source incorporated into the study?
  - Answer: Yes, half of Dulles drains to this watershed. Dulles has a VPDES permit, so they will be a point source included in this analysis. Additionally, Dulles utilizes Propylene glycol as a deicer on the side of the airport that drains to Horsepen Run.

### **3. Discuss Broad Run watershed characterization progress**

Carlington Wallace, ICPRB presented the current progress with the Broad Run watershed characterization - discussing the watershed boundaries, ecoregions, land cover, construction general permits, Virginia Pollutant Discharge Elimination System (VPDES) permits, and Municipal Separate Storm Sewer Systems (MS4) Facilities.

- Question 10: Is VDOT included as an MS4 permit holder?
  - Answer: That must be officially confirmed but it is expected to fall within the watershed. Dulles Toll Road is also expected to fall within the watershed. The process of confirming MS4s takes more time, as jurisdictions and areas that overlap can be complex.
- Question 11: There are 2 VPDES general permits for Amazon, would other data centers in the area be covered by the County's MS4?
  - Answer: Those permits are not for data centers, but distribution centers. In Loudoun, the majority of the cooling water used for data centers is discharged to the sanitary sewer system. The VPDES general permit held by Microsoft is only VPDES permit for a data center in this watershed. When a data center is constructed, the stormwater runoff associated with construction activities is covered under a Construction Stormwater general permit..

### **4. Provide an overview of the TMDL study timeline for Broad Run and next steps**

Ms. Thompson provided the anticipated project timeline for the Broad Run TMDL study.

- Question 12: When would the wasteload allocation (WLA) be determined?
  - Answer: WLA is one component of the TMDL equation. The permitted point sources are identified as sources of the pollutants during the pollutant source assessment, and will be allocated a portion of the WLA for the TMDL equation that is developed. Several options to allocate the WLA amongst the point sources, and also consideration for future group, will be presented to the stakeholder groups for discussion. The same discussions will occur for load allocations. An allocation scenario will be selected based upon stakeholder group recommendations, which will then identify the specific allocated WLA for a specific point source.

Ms. Thompson clarified the difference of a Stakeholder Advisory Group (TAG) versus a Community Engagement (CE) group. Both types of stakeholder groups are open to the public, will provide the same level of information, allow the same level of feedback, and meet the same number of times. Either meeting type fulfills the public procedure process of a TMDL project.

The primary difference between the two groups is the level of formality. A TAG is a meeting of a public body and is required to be noticed and held in accordance with the provisions of FOIA. All individuals who wish to participate on the TAG will be considered on a case-by-case basis and membership is at the discretion of DEQ. Notification of the composition of the group will be sent to all individuals who requested participation. A request to be on the TAG is a commitment to attending every TAG meeting or providing an alternate if they cannot attend. Any member of the public may attend and observe TAG meetings. However, only group members who have been invited by the department to serve on the TAG may actively participate in the group's discussions.

In contrast, a Community Engagement meeting (or any subgroup) does not have a designated membership but will follow similar public notice procedures. Any individual who attends the Community Engagement meeting can participate and is encouraged to provide input. It acts more so as an open forum where all attendees may speak, and no quorum is required. If no requests are received to establish a TAG, the department does not establish a TAG with approved membership and DEQ will hold Community Engagement meetings.

The public comment period dates were provided to attendees (Feb 28 – March 31), primarily asking for interest in stakeholder meetings and whether there are requests for DEQ to convene a TAG specifically. Additionally, DEQ is asking if stakeholders had additional data to inform the stressor analysis. Additional data from stakeholders is requested to be sent to DEQ as soon as possible, so that data can be considered and incorporated in a timely manner by ICPRB into the watershed characterization that is currently underway.

Further clarification on the public comment period dates were given, as the DEQ online calendar posted the incorrect public comment dates.

Before closing the meeting, a final opportunity was provided for questions or comments.

- Question 12: Will EPA personnel changes impact this project?
  - Answer: If it difficult to know - DEQ does coordinate with them, so conditions at EPA could impact that. However, the primary participation from EPA is towards the end of the project timeline.
- Question 13: Does federal funding affect DEQ?
  - Answer: Yes

Ms. Thompson concluded the meeting by asking that any questions or comments pertaining to the Broad Run TMDL study be directed to her, and thanking attendees for their participation.