



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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April 28, 2006

Mr. Darrell Schwalm
Loudoun Watershed Watch
308 N. Lincoln Avenue
Sterling, VA 20164

Dear Mr. Schwalm,

Thank you for submitting the nominations for benthic macroinvertebrate and E. coli monitoring back in December of 2005. These nominations, along with water quality data from the Loudoun Watershed Watch (LWW) and the Loudoun Wildlife Conservancy (LWC) were helpful to identify streams for DEQ monitoring. Mr. Bryant Thomas at the DEQ Northern Regional Office has reviewed your requests.

Due to the number of nominated sites that we have received from your organization, I have compiled a list to summarize the sites that you have nominated. Below, you will find a list of sites that the LWW nominated where DEQ will perform follow up monitoring.

- 1. Dutchman Creek-** DEQ will establish a water quality and bacteria monitoring station at the Route 674 bridge crossing. Based on benthic data provided by the two LWC monitoring stations, DEQ sees a low probability for benthic impairment and will not establish a benthic station in this creek.
- 2. Mouth of North Fork Catoctin Creek-** Based on the nominations received by the LWW, DEQ will establish a benthic monitoring station near the mouth of the North Fork Catoctin Creek by the end of 2006.
- 3. Mouth of South Fork Catoctin Creek-** Based on the nominations received by the LWW, DEQ will establish a benthic monitoring station near the mouth of the South Fork Catoctin Creek by the end of 2006.
- 4. Piney Run-** DEQ currently has a monitoring station in this watershed. Based on the LWW nomination, DEQ will continue to monitor at the currently established site. DEQ will consider the need for a second station located upstream of the pond in Piney Run. If so, DEQ will establish this station in 2007.
- 5. Limestone Branch-** DEQ will set up a station to test for water chemistry and E. coli. This station will be located on Limestone Branch at Shelma Lane. Data from LWC monitoring shows a low

probability for benthic impairment. Due to limited staff resources and the indication of a low probability of benthic impairment, DEQ will not set up a benthic station at this time.

- 6. Unnamed Tributary of Limestone Branch-** DEQ will set up a station to test for water chemistry and E. coli. This station will be located on the unnamed tributary near Shelma Lane. Data from LWC monitoring shows a low probability for benthic impairment. Due to limited staff resources and the indication of a low probability of benthic impairment, DEQ will not set up a benthic station at this time.

Because of limited staff resources and other considerations, DEQ is unable to perform follow up monitoring at the sites identified below. I am including a brief summary on the reasons why DEQ is not able to allocate staff and monitoring resources to these sites for this monitoring year. In addition, some of the streams nominated by the LWW had questionable access and safety issues when reviewed by DEQ staff. To help better understand the reasons why DEQ cannot monitor at these sites, I have enclosed a copy of a recent site survey report prepared for Bryant Thomas for some of the sites nominated by the LWW.

- 1. Beaverdam Run-** DEQ has set up a monitoring station and collected one sample in July of 2005. Further sampling is temporarily halted due to construction activities at the sample site. There are no other suitable monitoring locations to pull water samples nearby. Based on data from the LWC, stations 1ABEM-13A-LWC and 1ABEM-13C-LWC shows a moderate probability for benthic impairment. DEQ will list Beaverdam Run as a water of concern, Category 3C, for the 2006 305(b) Water Quality Assessment Report.

DEQ will be listing Broad Run as impaired for benthic macroinvertebrates in the 2006 303(d) Impaired Waters List. When DEQ performs benthic monitoring along the tributaries of Broad Run, a benthic survey of Beaverdam Run site will be included. A monitoring schedule has not yet been set for this survey. However, DEQ is aware of the importance to do follow-up monitoring in this stream.

- 2. Broad Run-** DEQ did an intensive sampling along Broad Run in 2005. DEQ station 1ABRB002.15 is located at the Route 7 crossing. Benthic monitoring was done at this site for the spring and fall of 2004 and 2005. DEQ also did benthic sampling in the spring and fall in 2005 at stations 1ABRB006.97 and 1ABRB015.43. Based on the sampling done in 2004, Broad Run will be listed as impaired for benthic macroinvertebrates in the 2006 303(d) Impaired Waters List. Because of the recent benthic sampling done by DEQ in this stream, DEQ will not establish another benthic monitoring station at this time. DEQ may monitor at this station during a future sample year if there is sufficient staff time to do the sampling.
- 3. Catoctin Creek-** Due to site safety and access issues, DEQ will not be able to honor the request to set up a monitoring station on the mainstem of the Catoctin at the Route 673 bridge crossing. DEQ attempted to find a secondary site to monitor in the area and was not able to find a safe location for bridge sampling. A full explanation is included in the enclosed site survey report.
- 4. Catoctin Creek Unnamed Tributary-** DEQ is listing this tributary as impaired for E. coli bacteria in the 2006 303(d) Impaired Waters List. The impaired segment begins approximately 1.2 miles upstream from the Route 693 crossing and will continue down to the confluence with Catoctin Creek. LWC monitoring on this tributary showed a low probability of benthic impairment.
- 5. Crooked Run-** DEQ currently has a monitoring station at the Route 727 Bridge crossing of Crooked Run. Based on citizen monitoring data at 1ACRF-3-NFGCW, 1ACRF-3-SOS, and

1ACRF-6-LWC, there is a low indication of benthic impairment at this site. This stream will be categorized as 3D (citizen monitoring shows no impairment) for the 2006 305(b) report for benthic parameters. Due to these reasons and limited staff resources, DEQ will not establish a benthic macroinvertebrate station in Crooked Run at this time.

6. **North Fork Goose Creek-** Currently, DEQ has two monitoring stations along the North Fork Goose Creek mainstem. These stations are located at the Route 722 and Route 782 bridge crossings. DEQ considered establishing a third water chemistry station at the Route 729 crossing based on the LWW nomination. This site was ruled out due to accessibility and safety issues. The Northern Regional Office of DEQ is considering adding a station at the Route 733 crossing. If this site is accessible and safe for our sample teams, a water chemistry station will be included at this site.

Based on benthic data from the citizen volunteer stations 1ANOG-5-NFGCW and 1ANOG-5-SOS, there is a high probability of benthic impairment. For the 2006 305(b) report, DEQ will list this stream segment as a water of concern, category 3C, for benthic conditions. DEQ will prioritize this stream segment for follow up monitoring by DEQ biologists.

In addition, please note that in 2004, DEQ established a probabilistic monitoring station located 0.91 stream miles from the mouth of the North Fork Goose Creek. DEQ biologists collected benthic samples during the spring and fall of 2004. The SCI score of these two surveys was 68 and 63 respectively. These scores indicate a minimal impact of the benthic community. Based on this data, DEQ will not do follow up monitoring in this lower section of the North Fork Goose Creek.

7. **Milltown Creek-** DEQ will not be able to set up a benthic macroinvertebrate monitoring station due to limited staff resources. Based on established data, DEQ will list Milltown Creek as impaired for E. coli bacteria and will appear on the 2006 303(d) Impaired Waters List. This impairment will begin at the confluence of the unnamed tributary of Milltown Creek, approximately 0.34 river miles upstream of the Route 681 bridge crossing, and continue downstream until it converges with Catoctin Creek. Based on citizen monitoring data provided by the LWC, the stream flowing through the LWC site 1AMIH-2-LWC shows a medium probability of benthic impairment. DEQ will list this tributary as a water of concern, Category 3C, in the 2006 305(b) report.
8. **Panther Skin Creek-** DEQ sampled along this creek at the Route 719 Bridge (1APAE004.21) from 2003 to 2005. Monitoring found a high occurrence of E. coli violations to the water quality standard for recreational use. This station will appear on the 2006 303(d) Impaired Waters List. LWC monitoring at site 1APAE-12-LWC indicates a low probability of benthic impairment. Because of these reasons, DEQ will not establish a new monitoring station in this watershed in the near future.

DEQ will evaluate future monitoring further downstream of the creek. However, the only bridge available for sampling downstream of the Route 719 crossing is the Route 623 crossing. Based on a sample site survey in 2003, DEQ considered this crossing unsafe for DEQ sample teams.

9. **Tuscarora Creek-** Based on data from DEQ monitoring; DEQ will list Tuscarora Creek as impaired for E. coli bacteria (Category 5A) in the 2006 305(b) report and will appear on the 2006 303(d) Impaired Waters List. Citizen monitoring done by the LWC at site 1ATUS-2-LWC showed a medium probability of benthic impairment. For the 2006 305(b) report, DEQ will list

this segment as a water of concern, category 3C, for benthic conditions. DEQ will prioritize benthic monitoring in this creek but due to limited staff resources, will be unable to monitor the site for 2006.

DEQ has recently completed a benthic study in the Lower Goose Creek watershed as part of a benthic TMDL. DEQ established a benthic monitoring station at river mile 2.38 near Route 7 and upstream from the golf course at river mile 3.18 of the Lower Goose Creek watershed. DEQ will look into setting up a benthic monitoring station in Tuscarora Creek as part of the benthic TMDL in Goose Creek.

On behalf of DEQ, we would like to thank the Loudoun Watershed Watch for the nominations. Though DEQ was unable to establish monitoring stations at all of the sites nominated by the LWW, the nominations did help highlight areas for future monitoring by DEQ. If you are interested in viewing DEQ's water quality monitoring data, it is available on the DEQ website at <http://www.deq.state.va.us/watermonitoring/>. If you have any questions about the nomination selections, please contact Bryant Thomas. You can reach Bryant at (703) 583-3843 or by email at bhthomas@deq.virginia.gov.

Sincerely,

James E. Beckley
Water Quality Data Liaison

cc: Bryant Thomas, DEQ NRO

