January 4, 2015

The Honorable Isiah Leggett and Council
Montgomery County Government

Re: Comparability and Use Assessment of Montgomery County Department of Environmental Protection Stream Monitoring and Maryland Biological Stream Survey Data

Dear Mr. Leggett and Council:

The Water Quality Advisory Group (WQAG) is composed of a cross section of Montgomery County citizens and includes representatives of businesses, the academic and scientific community, environmental professionals and the public at large. Our charter directs us to stay engaged in issues that have a direct impact on water quality and provide advice or feedback to the County Executive. The purpose of this correspondence is to provide you with background and a recommendation on the comparability and use assessment of Montgomery County Department of Environmental Protection (DEP) Stream Monitoring data and the State of Maryland’s Biological Stream Survey (MBSS) data.

Tracking stream monitoring. We have been tracking the County’s biological stream monitoring program and the use of the data collected in assessing the quality and health of the County’s streams. We are also aware of the MBSS and the importance of the data collected under that program in both assessing the quality of streams on a State-wide basis and in the development of Total Maximum Daily Loads (TMDLs) for impaired water bodies, when needed, to meet water quality standards.

State and County monitoring differences. We understand that there are differences in station selection and density and in laboratory protocols for benthic macroinvertebrates between the County and the State, and -- as a result -- that there are issues regarding the comparability of the data collected under these programs. We understand as well that when the Environmental Protection Agency (EPA) in 2003 completed a comparison of the County’s and MBSS benthic macroinvertebrate
field sampling and laboratory protocols, that the agency determined that the data could be effectively integrated for analysis and assessment purposes. As a result, the County shares its stream monitoring data with the State, and the State has considered the County’s data in making decisions about potential listings of County streams in the State’s list of impaired surface waters published in its Integrated Report of Surface Water Quality (combined 303d list and 305b report).

Although the Maryland Department of the Environment recently indicated some minor differences between the County's and MBSS benthic macroinvertebrate monitoring programs, the County’s data are collected at a greater density within watersheds, providing a more sensitive assessment tool. This finer scale is evidently a principal reason that the State has found the County's data useful. Since the 2003 comparison by USEPA, the County began using the same field sampling equipment (D-Net) as used by MBSS and therefore there should now be fewer differences between the two programs. New ways for the State to use the County's data may emerge from a more detailed comparability evaluation that could be beneficial to all.

Recommendation. Because of the increasing need to identify high-quality waters and evaluate the success of the County’s restoration efforts, we recommend that DEP ask the State to further evaluate how the County's greater density of biological stream monitoring data can be best used for determining and assessing local water quality impairments. The State and the County continue to expend significant resources to comply with State and local regulatory requirements, so it is increasingly important to optimize the use of the County’s more detailed biological stream monitoring data.

Sincerely,

Beth Forbes
WQAG Co-Chair