

---

## Anne Arundel County - Biological Monitoring MBSS Compliance

---

Janis Markusic <pwmark02@aacounty.org>

Wed, Nov 13, 2024 at 10:01 AM

To: Shannon McKenrick -MDE- <shannon.mckenrick@maryland.gov>, Jeff White -MDE- <jeff.white@maryland.gov>, Bel Martinez da Matta -MDE- <maria.martinezdamatta@maryland.gov>, Becky Monahan -MDE- <becky.monahan@maryland.gov>

Cc: Andy Becker <andy.becker@kci.com>, Erik Michelsen <pwmich20@aacounty.org>, "Victoria, Christopher" <pwvict16@aacounty.org>, Bryan Perry <pwper85@aacounty.org>, Alexander Dyson <pwdyso23@aacounty.org>

Hello all,

It has been a few months, and the County and our bio program consultant have been working with the benthic taxonomy lab regarding compliance with MBSS lab procedure requirements. We have been assured that the lab will use the MBSS-required sorting tray for all County samples beginning in 2025.

We also requested the lab conduct a side-by-side comparison between the modified Caton tray (used in 2019, 2020, 2021, 2023, and 2024) and the MBSS-required sorting tray to understand how differences between these two sorting trays may affect benthic macroinvertebrate subsamples. This comparison study will use the County's 2025 benthic macroinvertebrate samples, to be collected in March-April 2025, as described in the attached Comparison Study Summary. The study results would most likely be available in late 2025.

Should you have questions or require clarification on the study design, please reach out to Andy Becker (KCI) and Chris Victoria and/or myself (all copied on this email).

On behalf of the County, I once again thank MDE for their consideration with respect to our MS Permit compliance.

Best regards,  
Janis

On Tue, Aug 13, 2024 at 10:51 AM Janis Markusic <pwmark02@aacounty.org> wrote:

Shannon,

The County appreciates MDE's consideration with respect to MS4 Permit compliance. As you know, we are working with the lab to determine if, indeed, the sorting tray discrepancy will have a significant effect on resulting metrics and BIBI calculations and will share information and comparison results with you and with MBSS when those data become available. Additionally, please know the lab will be using the correct MBSS-required sorting tray in the future.

Janis

On Tue, Aug 13, 2024 at 9:21 AM Shannon McKenrick -MDE- <shannon.mckenrick@maryland.gov> wrote:

Janis,

Thanks for bringing the issue of incorrect MBSS lab methods to our attention. MDE understands that Anne Arundel County recently discovered that its contracted lab has been using the incorrect tray for benthic macroinvertebrate subsampling. This does not align with the MBSS methodology requirement in the MS4 permit.

The potential outcome is that years of data that may not be usable for state-wide analysis or incorporation with other benthic macroinvertebrate datasets. However, the data may still be used to assess implementation within the County, which meets the primary intent of the permit's monitoring requirement. Since the benthic sampling still provides a use to the County, and the County is taking the steps required to rectify the error, MDE does not consider this to be a permit compliance issue and it does not affect monitoring plan approval.

The County should be using the correct MBSS 100 grid tray in future rounds of the biological monitoring in order to provide a biological dataset that can be used for statewide analysis and to accurately reflect the approved monitoring plan and laboratory QAPP.

Thanks again for bringing this issue to our attention. Please let us know if we can provide additional assistance!

--

**Shannon McKenrick**

Natural Resources Planner  
Water and Science Administration  
Maryland Department of the Environment  
1800 Washington Boulevard  
Baltimore, Maryland 21230  
[shannon.mckenrick@maryland.gov](mailto:shannon.mckenrick@maryland.gov)  
410-537-4418 (O)  
[Website](#) | [Facebook](#) | [Twitter](#)

Click here to complete a three question [customer experience survey](#).

--



**Janis Markusic**

*She/Her/Hers*  
Dept. of Public Works  
Bureau of Watershed Protection & Restoration  
Sr. Planner/Program Manager  
O: 410.222.0551

**The Best Place  
For All**

[www.aacounty.org](http://www.aacounty.org)



**AACountywide\_SortingStudyDesign\_10022025.docx**  
20K