

SB 969 - Whole Watershed Act

COMMITTEE – Education, Energy and the Environment

Testimony on SB 969 (Elfreth)

POSITION - FAV ONLY WITH AMENDMENTS

Hearing Date - March 5th, 2024

Good afternoon. My name is Allegra Cangelosi. I am a Maryland citizen of 35 years, and an environmental professional focused on the Great Lakes environmental protection and management (retired). Thank you for this opportunity to testify on SB 969, introduced by Senator Elfreth. One goal of SB 969 is to improve the integrity of “stream restoration” contract services by making contractors accountable to a Licensing Board. It also authorized pilot studies to demonstrate best practices to improve the health of 5 Maryland streams. However, as currently drafted, this bill perpetuates the status quo of extremely dramatic “tear it up and rebuild it” approaches to on-going and rapid MD stream work. This oversight will result in unnecessary and profound natural resource damage. Notably, many of the most authoritative scientific analyses on BMP effectiveness have been conducted, already, in the Mid-Atlantic region. It would be a tragic mistake to postpone maximizing use of BMPs while this bill’s pilot studies to play out—a period of 5-10 years. **Due to this problem with the proposed process as drafted, my testimony is in support only with amendment, and request that the bill sponsors carefully consider this concern.**

Background:

Maryland’s streams are complex ecosystems which deliver critical ecological and human health services to Maryland communities. These services include storm water management, water filtration, carbon sequestration, biodiversity habitat, recreation and natural beauty. As we are all aware, over time, Maryland streams have become severely degraded by heavy run-off, chemical pollution and climate change effects.

MD Accounting Guidance defines a range stormwater control approaches which could be employed for the purpose of reducing polluted run-off to and stream bank erosion within the Chesapeake Bay watershed. The approaches defined in the MD Accounting Guidance as “stream restoration” focus on stream channel reinforcement with or without ecological considerations. These “tear it up and rebuild it” approaches entail wholesale destruction of the existing stream ecosystem and removal of upland trees to give heavy construction machinery access. There is growing scientific evidence that these disruptive interventions, even with tree replantings, harm streams as functioning ecosystems in a manner they may never recover from. Recent studies are also showing these engineered restorations often require repair soon after completion, likely because they do nothing to abate run-off volumes.

Fortunately, the MD Accounting Guidance also allows for non-destructive, more stable, and more effective approaches to achieving storm water management and stream erosion prevention. These alternative, more effective approaches address stream bank erosion, and at the same time protect natural stream biological/physical/chemical features. They are termed Best Management Practices (BMPs). These non-destructive approaches are strangely not included in the term

“stream restoration” practices as defined by Maryland Accounting Guidance, but they restore streams.

BMP effectiveness depends upon the retention of stream valley mature trees, which are critical to stream ecosystem structure and function. This fact is in stark contrast to tear-it-up-and-replace-it approaches that destroy stream valley forests in the interest of giving access to heavy construction equipment. BMPs they reduce run-off at its sources, and preserve complex streambed ecosystems to reduce storm water impacts. Their effectiveness at storm water control and biological uplift is well-validated. Many of the most authoritative scientific papers on BMP effectiveness are rooted in Mid-Atlantic region case studies. Based on research to date, BMPs also have fewer hidden costs over time. Further, they do not destroy stream ecosystems as operations defined as “stream restoration” in Maryland Accounting Guidance often do.

In sum, BMPs are allowed in the MD Accounting Guidance. They are effective. They are simply underutilized in stream health management in Maryland.

Issues and Ways to Improve SB 969

SB 969 as drafted will have the effect of cementing tragic overuse of ineffective and destructive approaches to stream restorations in place in Maryland. Specifically, as currently drafted:

- BMPs are not included or promoted among the array of “stream restoration” alternatives available to counties and industry for storm water management.
- The newly created Licensing Board membership comprises predominantly industry members with an interest in heavy-equipment projects.
- Contractor competency and project incorporation of BMP implementation is not encouraged or incentivized *in lieu* of unnecessarily destructive approaches.
- Tree conservation is not among the measures that contractors are directed to undertake to enhance the environmental soundness of stream restoration (only replanting).
- Contractors can solicit projects, and there is little accountability to the public on MS4 project plans and outcomes.
- State and county officials are not required to identify and require through permits all opportunities for BMP implementation *in lieu* of destructive approaches.

Fortunately, some of these problems inherent in the current formulation of SB 969 can be fixed, and in a manner consistent with the bill’s purpose to improve industry standards around stream restoration work. **Specifically, SB 969 should be amended to:**

- Discourage stream restoration projects involving heavy equipment and incentivize use of BMPs that conserve natural stream beds and existing trees.
- Include BMPs the range of tools for which licensed firms conducting stream restoration work must show competency, either by including BMPs in the statutory definition of “stream restoration practices” or defining them separately.
- Require all project applications to specify goals for biological and ecological uplift, water quality, and mature tree conservation and measure outcomes against them. Require timely public access to this information.
- Require mature tree preservation plans and pre- and post-project mature tree maps to create accountability that losses were in fact minimized.
- Require expanded public notice, transparency, and community engagement, generally.

Maryland streams are at a moment of truth. Current approaches to stream work are unnecessarily destroying trees and streambeds, possibly forever. The sponsors of SB 969 know this to be true or the pilot studies would not have been authorized. However, Maryland law should not be allowing these destructive approaches to storm water management in the first place. Contractors and counties also should not be allowed to market such stream restorations to host communities as a park amenity.

In sum, Maryland law should explicitly accommodate and incentivize well-validated BMP approaches to stream improvement, starting now. There is no need to wait. As noted, many of the most authoritative scientific analyses on BMP effectiveness were conducted on streams in the Mid-Atlantic region. It would be a tragic mistake to wait for this bill's pilot studies to play out—a period of 5-10 years—before formally incorporating BMPs into on-going, licensed stream restoration work in Maryland, and decisively incentivizing their use. I urge you to carefully amend this bill to ensure it truly results in stream resource protection and improvement in the State of Maryland.

Thank you for this opportunity to submit testimony. I provide below scientific and technical sources for this testimony. Thank you.

Sincerely:

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RESOURCES

RESOURCES

Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated Guidance for National Pollutant Discharge Elimination System Stormwater Permits”

<https://mde.maryland.gov/programs/water/StormwaterManagementProgram/Documents/Final%20Determination%20Dox%20N5%202021/MS4%20Accounting%20Guidance%20FINAL%2011%2005%202021.pdf> 1

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Hilderbrandt, Robert H. and Joseph Acord, Appalachian Laboratory University of Maryland Center for Environmental Science And Collaborators Timothy J. Nuttle and Ray Ewing Civil and Environmental Consultants, Inc. 333 Baldwin Road, Pittsburgh, PA 15205

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