

HOUSE BILL 869

By: Delegates Gilchrist, Foley, D. Jones, Lehman, J. Lewis, Ruth, Stein, and P. Young

Wetlands and Waterways Program – Authorizations for Ecological Restoration

Committee: Environment & Transportation

Position: Opposed as currently written

Submitted by Merikay Smith, 14909 Spring Meadows Drive, Germantown, MD 20874

I have served on the Board of the Muddy Branch Alliance for years as well as Seneca Creek Watershed Partners, where I am currently president. I have serious concerns about some language of this bill.

In a Feb. 16, 2022 lecture series hosted by Montgomery County Dept. of Environmental Protection, Dr. Sujay Kaushal, University of Maryland, shared data which showed groundwater had higher levels post-restoration of various elements (nitrogen among them) peaking at 5 years out and by 10 years were back close to pre-restoration levels but actually higher again over time post 10 years for some elements (due to the loss of extensive tree root systems during “restoration”). In questions afterwards Dr. Kaushal said he had sought for but not found, studies which comprehensively looked at the ecological impact of stream restorations. Scientists tend to focus on particular areas of expertise (in his case, the impacts on uptake of various elements in groundwater). This bill relies on the rather vague concept of “best available science.”

Studies of post-restoration macroinvertebrate levels have found that almost universally these are worse post-restoration and take many years to rebound, and often do not ever return to a pre-restoration state. From a summary of research looking at 40 Maryland stream restoration projects: “Despite the promise and allure of repairing damaged streams, there is little evidence for ecological uplift after a stream’s geomorphic attributes have been repaired....**In fact, the unrestored sections upstream were often ecologically better than the restored sections or those downstream of restorations.** Our results suggest that restoration activities do not mitigate the reasons causing the ecological declines. Higher levels of Impervious Surface Cover (ISC) in the watershed has an overarching influence on Piedmont streams (but not in the Coastal Plain). **Restorations actually decreased in ecological health measures to a greater extent as ISC increased than their unrestored counterparts** upstream. Ecological measures also responded negatively to the degree of disruption caused by the restoration. Longer restorations and those with more installed structures had lower ecological uplift measures in the Piedmont, while those in the Coastal Plain responded negatively to greater amounts of installed root wads and step pools. **A key point here is that the amount or intensity of restoration did not improve outcomes in either region.**” https://cbtrust.org/wp-content/uploads/Hilderbrand-et-al_Quantifying-the-Ecological-Uplift.pdf

Because stream restorations are a simpler path to MS4 permits (being less complex to oversee than out of stream BMPs and thus considered cost effective) and provide profits for companies doing the work, there seems to be no incentive for local government to seek what would be best for the wetlands and waterways or their associated ecosystems. Does this bill seek to apply more scientifically backed criterion earlier in the planning phases of restoration? If so most restorations as currently designed would not go forward and the bill would have my support.

However, this bill, as currently written, would prioritize project completion over protecting wetlands and waterways. Not only are restorations devastating to the segment of waterway being “restored,” there can be tremendous associated loss of environmentally complex woodlands or other riparian habitats.

This bill, despite some of its otherwise positive language, would exacerbate an already heavily weighted system that pushes for restorations. This bill would prioritize efficient completion of restoration projects, waiving concerns over alteration, impairment or disturbance of wetlands or waterways. **Legislators should instead ask for a moratorium on further restorations until there is scientific evidence showing ecological uplift post-restoration. As shown in a published study funded by the Chesapeake Bay Trust, not only were there ecological declines post-restoration, but those areas were more negatively impacted over time from increased impervious surface than similar unrestored stream areas.**

This bill states:

(6) IF APPROPRIATE, WAIVE ANY REQUIREMENT TO MINIMIZE ALTERATION, IMPAIRMENT, OR DISTURBANCE OF A WETLAND OR WATERWAY IF AN ALTERATION, IMPAIRMENT, OR DISTURBANCE OF THE WETLAND OR WATERWAY IS NECESSARY FOR THE VIABILITY OF THE PROJECT; AND

(7) PROVIDE A METHOD FOR EXPEDITING REVIEW OF WETLANDS AND WATERWAYS AUTHORIZATIONS FOR ECOLOGICAL RESTORATION PROJECTS FOR THE PURPOSES OF:

(I) ENSURING STATE FUNDING FOR RESTORATION IS USED MOST EFFICIENTLY AND EFFECTIVELY; AND (II) AVOIDING UNNECESSARY COSTS ASSOCIATED WITH WETLANDS AND WATERWAYS AUTHORIZATIONS AND PROJECT CONSTRUCTION IN ORDER TO LOWER THE OVERALL COSTS TO THE STATE TO ACHIEVE ITS CHESAPEAKE BAY RESTORATION GOALS UNDER THE CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD AND THE 2014 CHESAPEAKE BAY WATERSHED AGREEMENT.

My concern is that this bill would further prioritize “efficient” destruction of our waterways to meet MS4 permits. Despite the bill’s language referring to applying best science, it would in practice mean that projects could waive “any requirement to minimize alteration, impairment, or disturbance of a wetland or waterway” if “necessary for the viability of the

project.” Project viability becomes the measure of whether “alteration, impairment, or disturbance” is allowed.

Across the state restoration practices are reshaping our waterways. Advocates for restorations (primarily contractors and government staff) say streams have already been impacted by humans so further degradation or manipulation doesn't matter. It may be true that a “pristine” stream in our rapidly urbanized state is rare, but there are still significant areas of functional stream ecosystems with associated habitat within suburban areas which despite increased development still benefit from healthy ecosystems within a complex, genetically connected ecosystem unique to its particular place. All that can be lost or severely impacted by “restoration.”

In my home watershed (Seneca Creek) there have been a series of “stream restorations” and more are scheduled. Often post-restoration there are increased problems with invasive plants. Only recently has there been a change to require post-restoration maintenance to 5 years out but even so, with vast areas of disturbed soils with access to full sun, restoration sites become heavily infested with invasive plants.

With the backdrop of climate change, it's ironic that government funds “restoration” which clear cuts areas of mature (often 100+ year) trees. I hope you will rewrite this bill so it better defines what is meant by “best science” and remove wording that prioritizes project completion over environmental impact.

I am attaching a series of photos showing an area of 3+ acres of mature woods that are being removed during a current stream restoration at Solitaire Court, Gaithersburg, MD. Photos are from last year and as recently as this week.



We got permission to transplant some small native plants prior to area being clearcut and bulldozed. Orange tags are trees requiring special permit to cut, due to trunk size. We could only save about 60 small plants of thousands.



Water comes from neighborhoods into stream full force, no BMPs to reduce flow.



After rain stream swells – but this will not be addressed by restoration as silt comes from upstream lack of BMPs. It will likely only be worse post-construction as the area will have lost its tree and plant layer.





Restoration not yet complete at Solitaire Court, Gaithersburg, MD. 2/23/2022