



Maryland Native Plant Society

APPRECIATION CONSERVATION EDUCATION

Testimony: HB1465 Environment - Stream and Floodplain Restoration Projects - Requirements and Limitations
Committee: Environment and Transportation
Hearing Date: March 11, 2026
Position: FAVORABLE

Chair Korman, Vice Chair Guyton, and honorable members of the Committee:

The Maryland Native Plant Society (MNPS) strongly supports House Bill 1465. It is long overdue. Stream construction often destroys natural, mature forest ecosystems and eliminates the services that these important systems provide to all Marylanders, including cooling, CO₂ absorption, O₂ production, pollution reduction, and stormwater management. Destruction of natural areas not only obliterates large numbers of mature trees and other plants, but also contributes to the significant decrease in pollinators, other beneficial insects, birds, amphibians, and small mammals. In addition, these projects contribute to the spread of invasive plant species, which then further damage our natural areas.

Complete recovery of natural ecosystems after stream construction can easily take decades or even over a hundred years if it occurs at all. Once destroyed, endangered native plants and habitats cannot be easily replaced or recreated. The young replacement trees planted after existing trees are destroyed do not come near to offering the same quality and quantity of ecosystem services as mature trees. Additionally, some plantings survive only a year or two.

Certain situations do require stream work. For example, action is warranted if water or sewer infrastructure is exposed, so at risk for catastrophic failure, or if streams are flowing within concrete channels. However, more often there are much better alternatives to destructive stream re-constructions.

Among MNPS' members is a select group of knowledgeable environmental professionals, including scientists who have been involved with numerous stream and wetlands restoration projects at the federal, state, and local levels throughout Maryland and the greater Washington-Baltimore region for more than 30 years. The work of these experts has ranged from examining stream geomorphology, identifying geohydrology, and assessing ecological impacts and post-construction plantings to determining best practices and making data-driven policy recommendations.

Based on the input from these seasoned professionals, MNPS strongly recommends that Maryland discontinue using so-called stream restoration projects to meet local and regional pollution reduction targets for the Chesapeake Bay. Such industry-centric practices do not work, provide no proven long-term ecosystem improvement (a major permitting requirement), and are environmentally destructive.

The Maryland Native Plant Society promotes awareness, appreciation, and conservation of Maryland's native plants and their habitats. Our engaged, active members represent all 24 state jurisdictions, from the coastal plain beaches to the western mountains. We reach 20,000 followers on social media. MNPS is a 501(c)(3) charitable organization incorporated in Maryland.

HB1465 is an important first step in providing necessary guidance and accountability to the Whole Watershed Act. This 2026 bill requires: (1) an alternative local watershed plan to be considered before any stream restoration or floodplain project is authorized, and (2) the project to demonstrate measurable biological uplift before credits are issued.

Professional engineer Bill Stack, Deputy Director of Programs at the Center for Watershed Protection, and Tom Schueler of the Chesapeake Stormwater Network were co-leads in developing the *Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects*. According to this document:

A severe training need exists among local and state governments, NGOs, and practitioners in understanding their application and the appropriate siting of projects... Stream restoration projects are supposed to demonstrate "functional lift" or improvement to the ecosystem. Generally, this is not happening, at least not to the extent that it should... As a result, municipalities are spending enormous amounts of money on projects that generate the necessary water quality credit but have no real impact on stream function...¹

There is no scientific evidence that "restorations" reduce pollution (i.e., nitrogen, phosphorus, and sediment) in either the forested stream valleys or the stormwater that is the root cause of pollution and erosion in the streams.^{2,3} The real issue affecting the Bay and its waterways is unchecked stormwater runoff, which is caused by overdevelopment of watersheds and by failure to implement adequate volume and pollutant best management controls.

To help the Bay, Maryland must manage stormwater before it reaches these streams. We must prevent the use of our forested stream valleys as stormwater management facilities. Irreplaceable native flora and fauna, wetlands, and water resources still found naturally along urban streams and the parks they flow through should be protected, not bulldozed.

Best practice recommendations to help ensure the preservation and future sustainability of forested stream valleys

- Hold the overarching principle of *Do No Harm* by prioritizing keeping sites natural and causing as little disturbance as possible.
- Before initiating construction, conduct an environmental review that thoroughly assesses all irreplaceable natural resources and determines which might be affected by a proposed stream construction project. All environmental concerns need to be properly quantified and considered to enable effective resource protection.
- Avoid all stream "restoration" projects in stream valley forests, where they are typically implemented, because these projects are not ecological restoration best practices. They are construction projects for the purpose of converting forested stream valleys and groundwater seepage wetlands into stormwater management facilities.
- Adopt a policy to disallow highly destructive, misapplied stream-construction and stormwater management projects in small-order, interior-forested, upper-headwater stream valleys.

- Prioritize controlling stormwater runoff from impervious surfaces before it reaches storm drains. Bioretention cells, bioswales, and dry basins are the most effective infrastructure for achieving this crucial goal.⁴
- Carefully and selectively armor stream banks and channels with wood, log jams, and snags that mimic natural processes. These techniques are proven best practice recommendations for stabilizing and helping to restore eroded stream channels.⁵ Often, the No Build Option is the best alternative.
- Be vigilant in controlling non-native invasive plants along waterways.⁶ It is critical to acquire funding for large-scale projects so they can be conducted by professional invasive-control companies when the work is not achievable by staff and volunteers on their own.

The Maryland Native Plant Society urges a favorable report on HB1465.

Respectfully,

Rod Simmons
Board, Maryland Native Plant Society
simmons22041@gmail.com

Judith Fulton
President, Maryland Native Plant Society
jfulton5@gmail.com

References

- ¹ Stack, W. 2018. Chesapeake Bay Program Stream Restoration Credits: Moving Toward Functional Lift? Center for Watershed Protection. <http://www.cwp.org>
- ² Simmons, R.H. 2021. Evaluation of the Mehlich-3 soil test for phosphorus with implications for calculating pollution reduction credits in the mid-Atlantic region. River Management Society Journal 34: 30-31. <https://www.river-management.org/assets/Journals-Newsletters/2021%20Summer.pdf>
- ³ Bailey, R., B. Gillespie, and C.K. Taylor. 2022. Final Report of the Taylor Run Monitoring Project, Contract 17052. https://www.hhparks.com/files/ugd/a605ce_16dd7931b7dd40a28c304df171618d77.pdf
- ⁴ Simmons, R.H. 2022. 'The Policy & Practice of Stream Restoration' [PowerPoint presentation]. John Clayton Chapter of the Virginia Native Plant Society. https://www.hhparks.com/files/ugd/a605ce_834b2e8e8ad746ababc6113954cb362e.pdf
- ⁵ Field, J. 2020. Analysis of the Stream Restoration Design of Donaldson Run Tributary B, Arlington County, Virginia. <https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:7e0b1d70-711f-40b5-a737-e60f608435bd>
- ⁶ Simmons, R.H. 2017. 'The Limits of Restoration: Getting to Know the True Nature of Your Stream Valley and Hopefully Keeping It Intact!' [PowerPoint presentation]. MAIPC/SERMA Conference at Juniata College, PA. [The Limits of Restoration - 2017 MAIPC-SERMA Conference](#)