SENATE BILL 0722/HOUSE BILL 1155 – DEFINITION OF ECOLOGICAL RESTORATION

COMMITTEE – Education, Energy, and the Environment

Testimony on SB 0722/HB 1155

Position – Unfavorable

Hearing Date – March 26, 2025 (submitted on March 24, 2025)

Dear Members of the Education, Energy, and Environment Committee:

I am Robert Dover, a resident at 6354 Tamar Drive, in Columbia, Howard County, Maryland. I am writing to request that you file an unfavorable report for Senate Bill 0722/House Bill 1155, Definition of Ecological Restoration.

Having reviewed all of the comments filed for both bills during the February hearings, I find a problematic trend. Those comments are almost entirely "favorable", and the justification provided by most or all of them is the need for a consistent definition of the term "Ecological Restoration" to be codified in Maryland law. However, in reading those comments, I find it odd that none of them attempt to explain why the specific wording proposed in the definition is accurate, useful, or consistent with federal law and guidance. It is not.

Item (1)

The definition that would be adopted in the proposed Subtitle 10 1-1001(1) is that "Ecological Restoration" would be an "activity undertaken with the goal of recovering, re-establishing, or enhancing a degraded, damaged, or destroyed ecosystem through (1) Improvements to physical, chemical, OR biological characteristics or processes." (emphasis on the word "OR" added).

The intent of Congress in establishing the Clean Water Act is stated in Title 33, Subchapter I, Section 1251(a). This reads that the goal and policy of Congress is "Restoration and maintenance of chemical, physical AND biological integrity of Nation's waters" (emphasis on the word "AND" is added), and the first sentence reads that "The objective of this chapter is to restore and maintain the chemical, physical, AND biological integrity of the Nation's waters" (emphasis added on "AND"). The text of the Clean Water Act goes on to repeat this same definition eight more times, but never refers to programs or objectives intended to achieve "physical, chemical, OR biological" (emphasis on the word "OR" added) improvements.

The same language of the Clean Water Act is then carried into EPA's Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (60 FR pg. 58605-58614). Section I (Introduction) B (Background) of that document states that "The objective of a mitigation bank is to provide for the replacement of the chemical, physical AND biological functions of wetlands" (emphasis on the word "AND" added).

If the objective of the legislation is to clarify Maryland state law by providing a definition, that objective is actually complicated by adopting a definition that is not only inconsistent with Federal law and guidance, but is actually much less restrictive than Federal law and guidance. Because such projects have to comply with both State and Federal law, the need to accomplish all three objectives ("chemical, physical, AND biological") to comply with the Federal law makes the less restrictive State law moot. In fact, definition in State law is not needed, because there is a clear and more restrictive law that is defined under Federal regulation.

This difference is not just semantic. It has real world effects.

First, of the three objectives, one of them (physical) is very simple to accomplish and demonstrate compliance with, while the other two (chemical and biological) are far more difficult. Establishing the physical, geomorphic appearance of a functioning stream can be accomplished, especially in a short and medium timeframe, just by earth-moving and grading. This activity requires removal of mature trees, along with its consequent impacts to habitat, hydrology, and visual aesthetics in the community, but is easy to accomplish. However, for a large number of well-documented reasons, the act of restoring the physical appearance of a functioning stream does not, by itself, creates the conditions necessary for improvement of water quality (chemical) or ecological function (biological).

The second problem is the manner in which stream restoration proponents are empowered to lean on the word “OR” as a communications tool to support their claims of success, and to propagate a favorable impression of “stream restoration” projects to project stakeholders and community members. In testimony before the Columbia Association (CA) Board in April 2024, the CA Staff, the landowner for the Unnamed Tributaries of the Little Patuxent River stream restoration project, admitted that, while improvement of water quality and ecological function was hoped for when the project was approved, it was not the expectation and, in fact, there is no documentation showing that either has been achieved after five years. Instead, the one and only objective of the project was stabilization of stream banks (physical) which, they claimed, had been accomplished upon completion of construction. In this way, the simple act of “completion of construction” became the standard upon which CA could not only notify their stakeholders that the Unnamed Tributaries project was successful, but that this success should justify implementing even more, larger-scale, and more destructive projects in residential areas.

Even worse, numerous reports show that the physical manipulations of streams and floodplains into the physical appearance of a functioning stream are only temporary artifacts. Again, in the case of the Unnamed Tributaries to Little Patuxent River, the claim of success was being made even as survey data were showing that the physical conditions in the stream were deteriorating less than five years after completion of construction. The first post-construction streambank stability survey was conducted in June 2023, at 2½ years after completion of construction. That survey showed 12 areas of eroding streambanks and engineered structures “Functioning at Risk”. One year later, in June 2024, a new survey now showed 24 areas of eroded streambanks and structures “Functioning at Risk”. Overall, about one-third of the original structures, comprising more than 15 percent of the stream length, has been damaged by erosion – and that is based on a survey from almost a year ago. It is likely that these numbers have since grown. The project owner, the State Highway Administration, is currently planning a substantial field effort to repair these failing areas, less than five years after construction was completed. The project has also failed to make substantial progress toward reforestation, with about two-thirds of the tree plantings having died in the first 2½ years.

Using the “OR” standard, the landowner, project owner, and regulatory agencies have been, and would continue to be, empowered to claim that the Unnamed Tributaries project was a success, and that this success should be used to justify future projects, on a much larger scale, in residential areas.

<u>Items (2) and (3)</u>

In addition to deleting Item (1) because it is moot, I recommend the removal of Items (2) and (3). Both items are undefined and, by including the word “or” between them, the proposed legislation completely undermines the reliance on improvements to “physical, chemical, and biological” conditions in Federal law.

“Resilience” is usually used within the context of climate change, so my expectation is that the phrase “. . . improving resiliency . . .” will be taken to mean “making a stream less susceptible to erosion in the future climate-change era of stronger storm events”. That objective can be accomplished, and has been accomplished recently, by simply turning a semi-natural stream into an engineered stormwater conveyance. This was done in the past few months at the outfall of the Wilde Lake dam in Columbia, where the channel was lined, both bottom and sides, with very large, imbricated rocks. While those rocks are likely to be damaged in some future storm, they have, for the time being, made that channel far more resilient against erosion.

While that may be a reasonable objective for protection of the upstream dam and the downstream roadway, it is actually moving the stream in a sharply opposite direction of improvement of chemical, physical, or even biological conditions. Not only will this not achieve the Federal objective of improvement of all three conditions, but will also not meet the proposed State objective of accomplishing at least one of them. By including the word “or” between Items (2) and (3), a project owner could convert an entire stream channel, as large as they wish, into a fully concrete stormwater conveyance and, by making the accurate claim that the new channel is more resilient to larger storm events than the current stream, they could claim to be accomplishing “Ecological Restoration.”

Thank you for considering these comments, and providing an unfavorable report on SB0722 and HB1155.

Robert Dover

6354 Tamar Drive

Columbia, MD 21045

bobatwaterbury@aol.com