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March 25, 2025

To: House Environment and Transportation Committee **Subject:** <u>SB0722</u> (<u>HB1155</u>): Dept. of the Environment - Definition of Ecological Restoration

POSITION: FAVORABLE WITH AMMENDMENTS

First, I have no direct or indirect financial interest in this bill. Second, I am intimately familiar with this topic as a member of the 2022 House Bill 869 Ecological Restoration Permitting Study group. Input on the definition of ecological restoration was solicited by MD Department of the Environment (MDE) from study participants. Unfortunately, common-sense recommendations from myself and others with no financial interest was disregarded. In 2024, MDE released the "Ecological Restoration Permitting Study Report"¹ which reflected MDE's pre-determined, pro-industry mindset, as evidenced during the study group meetings – to its discredit, MDE did not allow participants to comment on, vote on, or append minority opinions to the report prior to its release.

Therefore, we urge you to make the following common-sense revisions that **eliminate counterproductive and confusing elements to ensure that appropriate, consistent, and clear goals are pursued in the ecological restoration permitting process.** These revisions will also remove permitting bottlenecks that prevent timely implementation of qualified projects.

• On page 2, line 4, item (1) IMPROVEMENTS TO PHYSICAL, CHEMICAL, OR BIOLOGICAL CHARACTERISTICS OR PROCESSES

<u>Change "OR BIOLOGICAL" to "AND BIOLOGICAL."</u> Since the ultimate objective of ecological restoration is to improve biology – the fish, oysters, crabs, plant life, etc. in the Bay, rivers, and streams - the definition of ecological restoration <u>must</u> include improvements to the physical, chemical, <u>AND</u> biological aspects of the activity. While physical and chemical improvements may be necessary, they are not sufficient. Biological improvement - the recovery of fish, oysters, crabs, etc. – is the only reason ecological restoration projects are undertaken. Plus, the terms physical, chemical, AND biological must be defined to avoid confusion. For example, is biological improvement to be defined using the Maryland Biological Stream Survey (MBSS) protocols for BIBI and/or FIBI²?

Without biological improvement, money spent only on physical or chemical ecological restoration has no value to the residents of Maryland or the commercial and recreational fishing industries.

¹https://mde.maryland.gov/programs/water/WetlandsandWaterways/Documents/Restoration/MDE_Ecological%20Restoration %20Study%20Report_8.6.2024.pdf

² MBSS Benthic Index of Biotic Integrity (BIBI) and MBSS Fish Index of Biotic Integrity (FIBI) <u>https://mde.maryland.gov/programs/water/TMDL/DataCenter/Documents/DRAFT-Guide_To_The_MBSS_BIBI_FIBI_2024.pdf</u>

Coalition to Stop Stream Destruction

Also, changing "<u>**OR</u>** BIOLOGICAL" to "<u>**AND**</u> BIOLOGICAL" would make this bill's definition of ecological restoration align with the US Army Corps of Engineers/EPA Mitigation Rule³ which requires compensatory mitigation projects to compensate for lost function which it defines as "the physical, chemical, <u>**and**</u> biological processes that occur in ecosystems." (Emphasis added)</u>

• Page 2, line 6, item (2) RETURNING NATURAL OR HISTORICAL FUNCTIONS OR SERVICES This item should be removed. First, the terms "natural"⁴ and "historical" are not defined. This will lead to countless specious interpretations. Second, this wording allows projects to destroy non-historical (which I will define as "post-colonial"⁵) ecosystems created after European colonization that nonetheless have been functioning for tens or hundreds of years. For example, some stream restoration types⁶ clearcut stream valleys in an attempt to recreate pre-colonial conditions. But, per botanist John Parrish, replanting "…trees on open ground to mitigate forest loss cannot replicate the loss of long-established forest soils, structure and biodiversity of forests destroyed…. It will take 100 years or more for a [replanted] forest to develop soils and structure capable of sustaining a full complement of native plants and animals."

In fact, "RETURNING NATURAL OR HISTORICAL FUNCTIONS OR SERVICES" is an impossible task given current watershed development and population levels. Just as the "Comprehensive Evaluation of System Response" (CESR) report⁷ from the Chesapeake Bay Program states that "The Bay of the future will be different from the Bay of the past because of permanent and ongoing changes in land use, climate change, population growth, and economic development," so will it be impossible to restore local ecosystems to "natural" or "historical" pre-colonial conditions. Why destroy a functioning "non-historical" ecosystem for an impossible goal? <u>The best we can hope for is biological improvement of current conditions (see item 1 above)</u>.

• On page 2, line 8, item (3) PROTECTING OR IMPROVING RESILIENCY

<u>This item should be removed</u>. The term "resiliency" is not defined⁸ and is open to specious interpretation. As written, this item adds confusion to the definition of ecological restoration.

Thank-you for your consideration of these common-sense changes.

Sincerely,

Kenneth Bawer, Coalition to Stop Stream Destruction, (kbawer@msn.com)

03/documents/2008 04 10 wetlands wetlands mitigation final rule 4 10 08.pdf

³ https://www.epa.gov/sites/default/files/2015-

⁴ Cane was one of the most abundant plants in pre-colonial wetland and riparian areas, so should "natural" canebrakes – an extensive monotypic stand of cane – be reestablished instead of forests. Plus, there is evidence that vast areas of our region were prairie and savanna created by fires intentionally set by Native tribes – should we define this as "natural?" ⁵ If you disagree with my definition, that illustrates my point.

⁶ Specifically, stream restorations which perform "floodplain reconnection" by Legacy Sediment Removal.

⁷ Comprehensive Evaluation of System Response (CESR) report, STAC Committee. <u>https://www.chesapeake.org/stac/cesr/</u>

⁸ We urged MDE to clearly define "resiliency" during the study group meetings.