Written Testimony – Sharon Boies

HB 942 - Wetlands and Waterways Program – Authorizations for Stream Restoration Projects

House Environment & Transportation Committee - March 3, 2023

SUPPORT

If passed, HB 942 will help ensure that Maryland is seeing a return on its significant investments in stream restoration while protecting our forested stream corridors and mitigating the damage of upland stormwater runoff.

HB 942 will:

- adds measures to ensure that all stream restorations achieve their stated goals,
- ensure that alternative plans for the entire watershed and surrounding community are given stronger consideration and
- that projects that mitigate upland storm water runoff where it's occurring are given greater incentives and higher pollution credit values for doing so.

The term "Stream Restoration" is meant to end a conversation, not start one. To many, however, these projects are "restorations" in name only. Contractors say they are going to "restore" the stream" maybe even for free or they might even be willing to pay landowners for conservation easements, which then allows these contractors to be awarded additional credits by obtaining the easements.

Proponents say these actions reduce pollutants in the waterways and help clean up the Chesapeake Bay, but there is little evidence of them having done so. The latest Chesapeake Bay Foundation report card gave the bay a D+, despite millions to billions of dollars spent over many decades it appears their main focus is on producing obligatory pollution credits and for large profits to private contractors, to offset environmental losses and harm in other locations and to allow continued development in sensitive areas further exacerbating the root cause of stream bank erosion- unmitigated upland stormwater runoff and without ever addressing the actual root cause, the runoff.

The following is my personal account of a project that took place in my neighborhood.

Our community in Columbia had ONE in-person meeting in 2018 about the stream "restoration" that occurred in the fall of 2020 and the winter of 2021. The contractor was granted a waiver exempting them from certain requirements of the Forest Conservation Act.

The Contractor logged over nine acres of mature woodland wetland forests in three stream corridors, but the total "impact" area was over 13 acres. It is my understanding this is the actual amount of forest that could still be lost. The over 100-year-old forest in our neighborhood is, in function, a bird and wildlife sanctuary.

This forested stream corridor, and others, had been intentionally preserved for decades for the betterment of the community per the founder and developer of Columbia per the founder and developer of our city over 50 years ago.

In the case of Columbia, the" stream restoration" began by construction workers, not biologists, bulldozing the multi-layered, lush, bio-diverse forest and all the ground vegetation down, followed up by excavators scraping away the fertile stream banks including any living organisms that couldn't get out of the way of the heavy machinery in time.

Dump truck loads of soil left the area. To me, this was a "demolition" which is a more fitting description of the end result. The stream water was pumped through hoses to newly engineered channels or straight onto the ground. The neighborhood smelled like death. The stench of it all lingered in the air for months and still does at times.

The contractor removed some of the large, straight logs and left the stumps and undesirable logs behind. I was told the Army Corps of Engineers recognizes stumps and debris are expensive to remove, and in many cases, the local landfills will not take this type of material. They buried some of the stumps, a practice that is frowned upon in most all other instances.

The contractors say this is all a part of the plan to slow the flow of stormwater through the newly created floodplain, to provide habitat and eventually add nutrients back into the hardened clay soil left behind.

The restored stream corridor looked like a natural disaster had occurred. Three months of calls and letters with me complaining 'if a tornado had caused this harm, it wouldn't be left like this", went unheard. This was where the neighborhood kids used to play, dogs used to swim, neighbors used to meet, talk, and birdwatch, it was a living classroom. Finally, a call to the SHA who funded the project prompted the contractor to come out to one of three construction sites and spend nine days chipping up debris piles as big as cars and jagged limbs sticking straight up into the air.

The excavators connected the stream with the iron rich groundwater and soil, causing a fluffy, orange bloom called "iron flocculate" that initially killed all the remaining aquatic life in all 3 streams locations It is a process that will repeat itself, over and over affecting the stream biology for an undetermined amount of time ,and perhaps even forever.

To add to their TMDL credit, the contractors restored every foot of the streams instead of limiting their work to individual eroding banks.

They lined the streams with quarried dark grey stone (rip rap) that is not native to Maryland streams. These stones act like solar heaters sitting in the newly exposed stream raising the water temperature even more. I was told they used rip rap instead of native stone because it was cheaper. This stone does not have the same symbiotic relationship with the native aquatic species, I'm told it also changes the PH level in the water and invasive species are clearly attracted to it.

The approximately 100 year-old native acorn producing oaks, hickory nut, beech, maple, cherry, and towering poplar trees some several feet across in diameter were replaced with trees that are a completely different species, one inch in diameter or less. They will never

become the food source and habitat of the trees they replaced. The trees are planted in rock hard clay in the baking sun with no one watering them and will have a hard time surviving.

The clay left behind had pockets that hold rainwater and filled with countless mosquito larvae until the planted sedge and grasses then invasive species took over where the mature forest flora like Trillium, Jack in the pulpit, ferns, skunk cabbage and Bloodroot once grew in deep rich loam and leaf litter.

This had been a crystal clean stream. Many Maryland streams are the crucial headwaters for drinking water. Ours was like an aquarium full of minnows, crayfish, frogs, newts, salamanders, water snakes and there were 4 species of turtles in the stream corridor. There were resident Herons and a parliament of owls. Now the oxygen depleted, cloudy, shallow stream has difficulty sustaining any life except for the occasional insect larvae and frogs in the spring who produce in the warm stagnant pools.

Our neighborhood was told we were helping the bay. We were also told this would reduce the frequency of required dredging of our neighborhood lake, designed to be the silt and sediment catch pond for the neighborhood, by 30 percent. There was no mention of climate change or cloudbursts or this project's ability to mitigate flooding in the future.

In fact, Columbia paid for a climate resiliency study that said we were in good shape and that the stream banks were safely keeping the streams where they belong, and the height of the banks were reducing the potential for flooding way into the future.

These forested stream corridors provide tremendous eco-services from wildlife habitat to carbon sequestration, oxygen production, wildlife viewing. During this time of global warming and species die-off, why is Maryland spending so much money to plant trees and clean up the bay while spending equal amounts to reduce the number of mature trees and degrade the sources of our drinking water

The SHA was awarded the pollution credits from this stream restoration. The contractor was paid $2.2 million for the work.

The residents and existing wildlife were left with an unrecognizable, biologically impaired, rip rap lined, smelly, engineered stormwater management facility in a logged forest that's missing entire species of flora and fauna.

Homes that were built looking into mature forests now look into each other with exposure to sun and wind and lack of privacy at night.

The carbon footprint from the logging, topsoil removal, construction vehicles, workers vehicles and heavy machinery constantly coming and going on our small neighborhood roads for months and the loss of the carbon filtering trees is incalculable. The contractor paid $50 to be able to drive through the streams. A Logging operation would be fined heavily for doing so.

It was stunning to see how fast the silt and sediment immediately begin to fill the newly restored stream back in because the restoration didn't address the root cause of it, the unmitigated upland stormwater runoff, but the most devastating thing to learn is that the neighborhood lake will have to be dredged, costing our HOA money, 2 years after the

restoration and the loss of our forest and clean, healthy stream.

If our neighborhood had been given the option , 2.2 million dollars should have been enough to buy a rain garden for every home. There may have been money left over for pervious pavement grants or bio-retentions in the road right -of-ways. This would have mitigated the runoff, preserved the forest, protected the stream, enhanced our quality of life and provided biological uplift.

This bill is not anti- stream restoration, it is a forward-thinking bill that recognizes the need to make bold changes to current best management. This bill will help to incentivize projects where the runoff begins and in urban areas instead of expecting other locations to sacrifice their forested stream valleys to allow continued development of urban areas- the areas that could benefit from more trees and greenspace the most.

Even though roughly only 6 percent of these projects are monitored for long term success, I was repeatedly told “just wait a few years” don’t worry, the trees will grow back, and the animals will come back but the truth is what took a century to grow was wiped out in a matter of weeks. It will take a century to replace a century old ecosystem.

I urge the Committee’s FAVORABLE report on HB 942.

Thank you for your consideration.

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