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### **Testimony in Support of SB 969**

Stream and Watershed Restoration – Stream Restoration Contractor Licensing and Chesapeake and Atlantic Coastal Bay Restoration and Funding (Whole Watershed Act)  
*Before the Environment and Transportation Committee, March 1, 2024*

We support Senate Bill 969. The proposed legislation funds five watershed restoration projects over five years. The projects will be chosen from a varied group of geographies and land uses, with a stated emphasis on overburdened and underserved communities where environmental hazards are severe and economic challenges abound. The bill also develops a new certification process for stream restorers to ensure that restoration projects progress consistent with protective standards. By targeting and fixing five watersheds at a time, the state would improve local environmental health. In turn, this improved environmental health would lead to healthier water and healthier people. We support this bill because the legislation would jointly benefit the state’s environmental health and the state’s public health.

#### **I. Water Health is Important for Environmental Protection**

Protecting waterways is important for environmental health. Every organism living within an ecosystem will be harmed if the water is poisoned. Pollution in the water can kill plants in the surrounding area as well as animals that reside in and drink the water.

Acutely toxic chemicals dumped by industrial polluters can damage the organ systems of various aquatic and amphibious animals. Trash dumped into waterways can harm animals that eat it and can clog and divert streams past their natural borders. Nutrient pollution can also devastate ecosystems by causing algae blooms and dead zones.<sup>1</sup>

In Maryland, the Chesapeake Bay is an incredibly important and vital resource. It is a source of food, recreation, and employment that provides various ecosystem services, such as filtering water and preventing shoreline erosion. However, the estuary that flows from waterways in six states—Delaware, Maryland, Pennsylvania, New York, Virginia, and West Virginia—so every water upstream that is impacted by pollution or degradation, will also have an impact on the Chesapeake Bay. While many Maryland streams seem disconnected from the Chesapeake Bay, the health of the whole watershed is connected, so protecting individual ecosystems will also protect the whole estuary.<sup>2</sup>

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<sup>1</sup> Melissa Denchak, *Water Pollution: Everything You Need to Know*, NATURAL RESOURCES DEFENSE COUNCIL, <https://www.nrdc.org/stories/water-pollution-everything-you-need-know#whatis>.

<sup>2</sup> Maryland Department of the Environment, *Our Treasured Ecosystem*, MDE (Accessed February 20, 2024), <https://mde.maryland.gov/programs/water/TMDL/TMDLImplementation/Pages/what-is-the-bay.aspx>.

Protecting waterways like wetlands and streams—which Maryland’s current law does—also provides more unseen ecosystem services that benefit everyone and everything living around them. Flooding is an increasing worry for Maryland as sea levels rise and more extreme storms increase in number. Strong and robust waterways, undamaged by pollution and degradation from construction are better able to mitigate flooding, thus decreasing the economic impact of these occurrences.<sup>3</sup> Annapolis and Baltimore are examples of cities already experiencing the economic impact of coastal flooding. Protecting waterways will also protect our environmental, cultural, and historic landmarks in these cities and across the state.

Focusing on the watershed as a whole in restoring streams and other waters is important because it ensures that the impact of these projects multiply in effect rather than remain fragmented and ineffective.

## **II. Water is a Social Determinant of Health**

Environmental conditions are a social determinant of health. A healthy ecosystem provides positive public health outcomes. Conversely, unhealthy air and water can lead to either temporary sickness, or permanent disease.

The United States Department of Health and Human Services notes that communities of color and low-income communities are more likely to face environmental conditions that correlate with negative health outcomes. This bill not only emphasizes helping to restore the state’s waterways, but the bill also prioritizes environmental justice projects in overburdened and underserved communities. This emphasis will help to alleviate the unequal burden shouldered by communities of color and low-income communities throughout the state.<sup>4</sup>

Polluted waterways can lead to unsafe drinking water. Water can be contaminated by harmful bacteria and chemicals. Bacteria, like *E. coli*, pollute well water throughout the state.<sup>5</sup> Toxic chemicals, like PFAS, pollute the Chesapeake Bay watershed. Hazardous chemicals can cause serious illnesses, like cancer. People rely on safe water consumption for a healthy and fulfilling life.<sup>6</sup>

Water is not only necessary for hydration, but also for sanitation. Access to clean water for sanitation is necessary for people to bathe and safely dispose of waste. If waste is not properly disposed of, then the natural environment will be polluted. Importantly, people can also

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<sup>3</sup> U.S. Environmental Protection Agency, *Why are Wetlands Important?*, U.S. EPA (March 22, 2023), <https://www.epa.gov/wetlands/why-are-wetlands-important>.

<sup>4</sup> U.S. Dep’t of Health and Hum. Servs., Health People 2030: Environmental Conditions (last visited Feb. 25, 2024), at <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/environmental-conditions>.

<sup>5</sup> Laura Wormuth, New UMD Well Water Data Suggests Contamination Frequent on Farms, *Maryland Today* (Mar. 13, 2023), at <https://today.umd.edu/new-umd-well-water-data-suggests-contamination-frequent-on-farms>.

<sup>6</sup> Josh Kurtz, Report Details Alarming Levels of Toxins Being Dumped in Md. Waterways, *Maryland Matters* (Sept. 28, 2022), <https://www.marylandmatters.org/2022/09/28/report-details-alarming-levels-of-toxins-being-dumped-in-md-waterways/>.

get seriously sick. Access to clean and safe water for sanitation keeps people in Maryland healthy.

Tainted water can infect the world-renowned Maryland seafood that people eat. Humans can get sick if the food we eat is contaminated. In Maryland, there is evidence that fish in our waterways contain per- and poly-fluoroalkyl substances (PFAS), so-called forever chemicals.<sup>7</sup> The same chemicals that would be toxic to drink, are also toxic to eat. By cleaning our waterways and our environment, we are also cleaning our food supply.

Aquatic recreation boosts mental health and is a draw for tourists. Marylanders and our visitors use the Bay and its tributaries for fishing, crabbing, boating, swimming, and other aquatic activities. These activities are more than pastimes or hobbies. These activities boost mental health and make the residents and visitors happier and healthier. These activities become dangerous, however, when the water's animals, plants, and destinations become polluted.<sup>8</sup> Polluted waterways cutoff people from the resources and activities that provide fulfillment which can harm public mental health. Polluted waterways will also stifle our vibrant Eastern Shore tourism.

### **III. Water Health is Important to Secure for Future Generations**

As water is vital for both ecological and human health, this resource must be secured for the youth of today and future generations. In recent years, there has been a push by young people to hold polluters and the government accountable for environmental injustices that will impact their ability to enjoy and use natural resources within their lifetimes, as well as for future generations.<sup>9</sup>

Without efforts to restore and protect the watershed, there will be innumerable ecosystem services lost for the youth of today and future generations. These services include using the waters of Maryland for food, drinking water, recreation, flood-controls, and the economic benefit that each of these provide for individuals and communities in the state.

People in the state rely on the state's waters for drinking water and sanitation. If groundwater is not protected, and if the Bay and its tributaries are treated as dumping grounds, then people within the state will not have access to clean water. Clean water is an essential environmental condition that determines the public health of the people of the state.

Maryland is known for blue crabs and oysters; indeed, we have designated the blue crab as the state crustacean.<sup>10</sup> They are a quintessential part of Maryland summers, but without a focus on restoring waterways, these fisheries could be lost. The Bay is still struggling with non-

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<sup>7</sup> Timothy B. Wheeler, 'Forever Chemicals' Found in Chesapeake Region's Freshwater Fish, Bay Journal (Aug. 25, 2020), at [https://www.bayjournal.com/news/fisheries/forever-chemicals-found-in-chesapeake-regions-freshwater-fish/article\\_789c01cc-e6d6-11ea-b4a5-c7a15055b4a8.html](https://www.bayjournal.com/news/fisheries/forever-chemicals-found-in-chesapeake-regions-freshwater-fish/article_789c01cc-e6d6-11ea-b4a5-c7a15055b4a8.html).

<sup>8</sup> Josh Kurtz, Enviro Group Warns of Beach Pollution as Heat Wave Lingers, Maryland Matters (July 14, 2023), at <https://www.marylandmatters.org/2023/07/14/enviro-group-warns-of-beach-pollution-as-heat-wave-lingers/>.

<sup>9</sup> Jeffrey Kluger, *The 'Juliana' Case Shows Where Climate Change Litigation Goes Next*, TIME (January 4, 2024), <https://time.com/6552129/juliana-vs-us-climate-case/>

<sup>10</sup> Maryland General Provisions Code §7-303.

point source nutrient pollution, which creates an uninhabitable environment for crabs, oysters, and other fish that live in the estuary.<sup>11</sup> Young people may not be able to fish with their families and have crab feasts to the same extent that Marylanders are able to now.

Waterways throughout Maryland provide many opportunities for recreation, like swimming, beaches, boating, and fishing. Protecting the ability of future generations to enjoy these activities throughout the watershed is important for the economic benefits for communities around these waterways and the ability to enjoy them themselves. Baltimore has spent the last decade working to restore the water quality of the harbor to make it possible to safely swim. While the work is still ongoing, it is likely that in the years to come this resource will once again be available to people that live in and visit Baltimore.<sup>12</sup>

One of authors of this testimony, Alex, spent much of her childhood in the summertime was spent in the creek by her house, which she was able to play in because it was clean and undegraded. We are part of the generation that has had access to these water resources, but without intervention, we will also watch them disappear—for the youth now and for future generations. This bill will ensure that children and future generations will be able to have these same experiences by restoring streams throughout the watershed, including in environmental justice communities.

#### **IV. Conclusion**

We support Senate Bill 969 because it would invest in the environmental health and the public health of the state. Children should be able to live in and explore the culture of our historic cities, like Annapolis and Baltimore, with access to clean water and without fear of flooding. Children should be able to fish, crab, and swim in the Bay and its tributaries without fear of being poisoned. By supporting this bill, we will be supporting the environment and health of our future. By supporting this bill, we will invest in the generations of Marylanders to come. For these reasons, we request a favorable report on Senate Bill 969.

*This testimony is submitted on behalf of the Public Health Law Clinic at the University of Maryland Carey School of Law and not by the School of Law, the University of Maryland, Baltimore, or the University of Maryland System.*

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<sup>11</sup> Maryland Department of the Environment, *Our Treasured Ecosystem*, MDE (Accessed February 20, 2024), <https://mde.maryland.gov/programs/water/TMDL/TMDLImplementation/Pages/what-is-the-bay.aspx>.

<sup>12</sup> Lillian Reed, *Is Baltimore's Harbor Swimmable? Advocates Take the Plunge to Prove It*, THE BALTIMORE BANNER (November 9, 2023), <https://www.thebaltimorebanner.com/community/climate-environment/baltimore-harbor-swim-environment-CV5YKBCDTRCHVKHUYJ6U3P5WGU/>.