

Committee: House Environment & Transportation

Legislation: HB 979

Position: SUPPORT

Date: February 28, 2024

Dear Chairman Korman and members of the committee:

The Severn River Association strongly supports HB979, which will help combat the growing threat of invasive plant species on our native plants and the broader environment.

The Problem

Invasive plants pose many threats to the environment, to our built infrastructure, and to our health. For our part, the Severn River Association is most concerned with the devastating impact these plants can have on ecosystems, including the destruction of critical biodiversity, diminished stormwater infiltration, heating of non-tidal streams, and negative changes to soil chemistry and biology.

Many invasive species are capable of rapidly overwhelming the area in which they take hold, like a valley or floodplain containing tributaries to the Chesapeake Bay. Plants like Japanese Stiltgrass (*Microstegium vimineum*), many species of Bamboo (*Phyllostachys spp.*), Autumn Olive (*Elaeagnus umbellata*), Japanese Knotweed (*Reynoutria japonica*), Common Privet (*Ligustrum vulgare*) and many others have already destroyed native plant communities and displace the animals that rely on them in countless areas of the State. When invasive species like these become dominant, in addition to losing biodiversity, we also suffer from decreased stormwater infiltration and increased pollution to our rivers and the Bay.

Invasive creeping vines such as English Ivy (*Hedera helix*), Japanese Honeysuckle (*Lonerica japonica*), Oriental Bittersweet (*Celastrus orbiculatus*), Mile-a-minute (*Persicaria perfoliata*) and Kudzu (*Pueraria montana*) have already killed hundreds of thousands of trees throughout the State by strangling the trees, overloading their branches causing breakage, introducing disease, and preventing the trees from photosynthesizing. The death of these trees in turn prevents their infiltration of

¹ See, e.g., <u>Maryland's top invasive plant species import harm to natives</u>, https://www.marylandmatters.org/2023/05/16/marylands-top-invasive-plant-species-import-harm-to-natives/; <u>Forest Pests https://dnr.maryland.gov/forests/Pages/programapps/pests.aspx; Taking on Maryland's Invasive Species</u>, https://www.nature.org/en-us/about-us/where-we-work/united-states/maryland-dc/stories-in-maryland-dc/maryland-invasive-species-taking-on-the-invaders-of-maryland/.



stormwater, which increases pollution from stormwater runoff, the fastest growing source of pollution to the Bay.² The State is already spending hundreds of millions of dollars to combat water pollution.³ We simply cannot afford to allow these trees to die and lose their stormwater capturing services, when even a single medium-sized tree can capture thousands of gallons of stormwater each year.⁴

Moreover, trees shade our non-tidal streams, helping to offset the impacts of increasing temperatures in freshwater tributaries. Many species of freshwater aquatic life like trout and the benthic invertebrates they consume require cool and cold water to survive. As temperatures continue to increase globally, the shading effect of trees on freshwater streams becomes more critical to the survival of these species, and to the overall water quality of a warming Chesapeake Bay. Warmer water holds less oxygen, making the Bay's dead zone increase as temperatures go up. Shading the tributaries is one of the most effective means of keeping rising temperatures in check and holding down the Bay's annual dead zone.⁵

Finally, invasive plant species actually alter the chemistry and biology of our soils, making it harder for them to capture and store stormwater, and exacerbating the problems of excessive stormwater pollution described above. Several studies have shown that invasive plants can alter soil chemistry and the biological communities of bacteria and fungi that make up soil.⁶ Invasive species of plants can reduce soil's capacity to absorb stormwater, make it more vulnerable to erosion, and contribute more sediment and nutrient pollution to our streams, rivers and Chesapeake Bay.

The Solution

University of Delaware ecology professor Doug Tallamy uses a metaphor to describe the problem of invasive species, and the puzzling fact that any such plants are still being sold in nurseries and other stores and planted in our yards.

Our environmental boat has sprung a leak. Many of us are trying to repair the leak; others are bailing to keep us afloat until the leak is plugged. What is baffling, though, is that far too many of us are dumping new buckets of water into our boat, as if sinking it will not be a problem for them. At this point, each of us must decide what role we will play in the future: Will you be a bailer or a dumper? Your choice of plants in your yard will determine what role you have chosen.⁷

² https://www.chesapeakebay.net/issues/threats-to-the-bay/stormwater-runoff

³ https://news.maryland.gov/mde/2021/11/05/mde-issues-stormwater-permits-for-large-md-jurisdictions-advances-climate-resiliency-and-equity/

⁴ https://www.fs.usda.gov/psw/topics/urban forestry/products/CUFR 182 UFfactsheet4.pdf

⁵ https://www.chesapeakebay.net/issues/whats-at-risk/stream-buffers

⁶ See, e.g. <u>Direct and Indirect Effects of Invasive Plants on Soil Chemistry and Ecosystem Function</u>, *Journal of Chemical Ecology*, Vol. 36, pp.59-69 https://link.springer.com/article/10.1007/s10886-009-9735-0; Plant Invasion and Soil Processes: A Mechanistic Understanding, *Plant Invasions and Global Climate Change*, pp. 227-246.
Douglas W. Tallamy, Nature's Best Hope 123 (Timber Press 2019).



HB 979 will prevent the continued sale of invasive plant species in Maryland. Unfortunately, many of the species that kill so many trees are still being sold in stores in Maryland (e.g. English Ivy⁸, bamboo⁹, and Japanese honeysuckle¹⁰). The current process for identifying and prohibiting invasive plant species in Maryland takes too long and requires more study and documentation than is necessary to establish the risk posed by these plants. The process established in 2011's requires a plant risk assessment, which requires considerable time and expense because it requires consideration of many potential future scenarios related to invasive plants, as opposed to the status assessment called for in HB979, which evaluates the invasiveness of nonnative species that currently occur in Maryland and focuses on the impact that these plants have now. The status assessment approach is quicker, cheaper, and more effective at removing dangerous plants from the marketplace.

Conclusion

Since 2011's system of invasive species review and regulation was put in place, only 6 plants have been prohibited from sale, despite clear understanding of the problems these species cause. Thirteen years of continued sale of species we know cause serious harm to our environment is too long. House Bill 979 will change this paradigm, and the Severn River Association urges a favorable report.

Respectfully submitted,

Jesse L. Iliff

Executive Director

Severn River Association jesse@severnriver.org

⁸ https://gardengoodsdirect.com/products/english-ivy

⁹ https://www.homedepot.com/p/Brighter-Blooms-3-Gal-Golden-Bamboo-Tree-BAM-GOL-34-3/312730903

¹⁰ https://www.lowes.com/pd/Proven-Winners-Yellow-Honeysuckle-Flowering-Shrub-in-1-Quart-In-Pot-With-Soil/5014250459