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SB345~~HB386~~ Pesticides – PFAS Chemical – Prohibitions

Education, Energy and the Environment
Committee~~Health and Government Operations~~
February 1~~8~~2, 2025
Brent Walls

FAVORABLE

Potomac Riverkeeper Network: *Our mission is to protect the public's right to clean water in the Potomac and Shenandoah Rivers and their tributaries. We stop pollution to enhance the safety of our drinking water, protect healthy river habitats, and enhance public use and enjoyment.*

PFAS is a class of now 15,000 chemical compounds that are considered "forever" pollutants because they do not break down easily in the environment and can bioaccumulate in all living species. EPA has acknowledged the pollution concern of many of the PFAS compounds by establishing proposed drinking water standards, potential waste load allocations and listing on the list of toxic chemicals. However, PFAS compounds are still used in products we use every day and unfortunately are used in our environment. Pesticides are applied to our farm fields, exposing our crops and leaching into soils and rivers contaminating private well systems and state fishing resources. The application of pesticides with PFAS as the active ingredient directly exposes our environment and our health to a number of illnesses including cancer. SB345~~HB386~~ is a logical step to reduce the im~~a~~pacts of PFAS that pollute our rivers, our land and our families.

- In 2022, 113 Waterkeeper groups sampled 114 waterways in 34 states and DC; where 83% of the waterways tested had significant levels of PFAS.
- Stormwater is the number one route of pollution impacting the Chesapeake Bay. PFAS pesticides ~~that include PFAS~~ are applied to all lands including agriculture, urban and rural communities. With climate change, more pollutants from the land are washed into our streams.
- PFAS is accumulating in fish species in Maryland streams from discharges and stormwater runoff. In 2023, Maryland Department of the Environment issued fish consumption advisories for PFAS at several locations across the state.
- PFAS in pesticides is not the active ingredient that kills pests and protects crops, but allows the chemical to last longer during weather events.

Waterkeeper PFAS Testing Results Showed Rural Streams Polluted the Most By PFAS

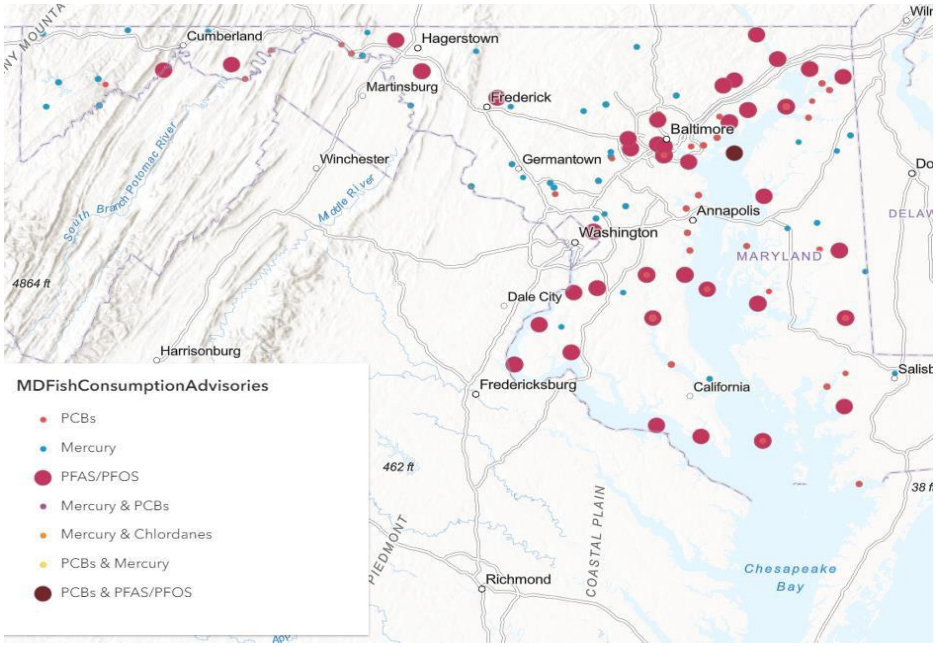
Waterkeeper programs across the US contributed to one of the largest water quality monitoring projects conducted by a group of environmental organizations to educate the public on the wide spread problem of PFAS pollution in our rivers and streams. Out of 34 states tested, 29 states had measured significant levels of one or more of the 35 PFAS compounds tested. The locations of each site range from urban industrial areas to streams running through rural agricultural lands. Some locations had an identifiable source like a military base or manufacturing facility; however, most sample locations comprised of rural lands where stormwater is the largest contributor of pollution to those rivers. Pennsylvania, Virginia and Maryland had some of the highest levels of PFAS pollution with Piscataway creek in Maryland at the top.

Chesapeake Bay Program Says That 84% of the Tidal Streams are Impaired by Toxic Chemicals

Stormwater pollution has long been recognized by the Bay Program as being the leading cause of Chesapeake Bay's health decline. The decline has been attributed to excess nutrients and sediment. However, while these pollutants are being washed into the Bay and into all the rivers and streams connected to the Bay, other pollutants are carried along with that same stormwater. The Chesapeake Bay Program states on their website that the 84% impaired tidal streams are polluted mostly by pesticides. The Bay Program recently sponsored a Toxic Contaminate Workshop focusing on PFAS chemicals in the Bay. One recognized source highlighted in the workshop by several federal and state scientists was PFAS used in Pesticides.

Maryland Issued Fish Consumption Advisories for PFAS at 40 Locations Across the State

PFAS is a pollutant that can bioaccumulate in most living organisms. Fish are much more susceptible to increased levels of PFAS that can be 1000s of times higher than the EPA recommended limits for drinking water. Maryland concluded a comprehensive study on PFAS in 15 different fish species at 40 popular locations for anglers and subsistence fishing communities, with 80% of the locations in rural or agricultural areas with limited industrial sources of PFAS.



In 2024, Dr. Vicki Blazer with USGS published a paper on the testing of small mouth bass at several river systems in the Chesapeake Bay, including Maryland. The results of the study identified two dominant sources of PFAS in agricultural areas, pesticides and biosolids. The chart below compares the land use at 4 of the locations. The second slide shows the levels of 4 PFAS compounds found in small mouth bass at each location with PFOS having higher concentrations. Although the river systems with low developed land use have lower PFAS levels, the cumulative nature of PFAS from pesticides contaminated small mouth bass at levels greater than Maryland's fish consumption advisories.

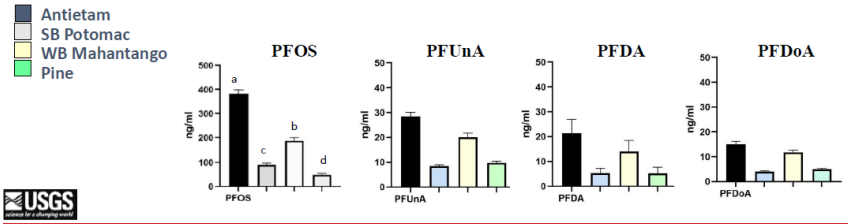
Land-use Comparison – Upstream Catchment

Site	Drainage area (km^2)	Percent Agriculture	Percent Pasture	Percent Crop	Percent Forest	Percent Developed
Antietam Creek	730	49	21	28	32	17
South Branch Potomac River	3,150	14	13	1	81	3
West Branch Mahantango Creek	218	32	12	20	60	7
Pine Creek	2,437	9	8	1	84	4

USGS

Initial PFAS Analyses - 2018

- **Used archived plasma from smallmouth bass collected at four sites for analyses of 13 PFAS**
- **Four PFAS were found in every sample with PFOS having the highest concentrations**



USGS

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Why are Pesticides with PFAS Used Over Alternatives?

Pesticides with PFAS as an active ingredient is a popular chemical used on farms, at businesses, schools and homes because of the properties of the PFAS chemical itself. The PFAS in the pesticides that should not be used is not the active ingredient that terminates pests or protects plants and spaces from pests. The PFAS in pesticides allows the pesticide to maintain its potency longer because the pesticide can weather rain events. PFAS is a waterproofing agent and that property alone is why these pesticides are favored over the alternatives. The weatherproofing property is also what makes these pesticides a greater threat to human health from secondary exposure by contact and a longer duration of leaching into rivers and groundwater.

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SB 345~~HB 386~~ Reduces Exposure to Maryland Residents

Pesticides are applied in large quantities to our farm fields, the medians of our major roads and highways, in schools and medical buildings, and used by Marylanders in their home gardens. The sale and use of pesticides in Maryland is exposing our families to PFAS pollution from the foods grown on our farms and from the fish and seafood we eat. Pesticides laced with PFAS run off into our streams contaminating fish that many disadvantaged communities require to sustain their families. Pesticides with PFAS applied to our farms leach into the soils and into our groundwater contaminating thousands of Marylanders on private wells. There are no federal or state drinking water standards for private wells. It is up Maryland to protect these vulnerable communities.

Since we know that 1,091 of the 14,000 pesticides registered for sale and are used in Maryland have PFAS as an active ingredient, we can simply reduce the PFAS exposure of our communities by stopping the sale of these known PFAS pesticides. This is not a big lift, since there are ~~several~~ numerous PFAS-free pesticides available as replacements. This bill will be a reasonable and important step towards protecting the health and welfare of Marylanders, our environment, our fish and wildlife. Action is necessary to fill the void caused by a slow-moving federal government. It's common sense to stop selling a known toxic agent that is being liberally applied in settings throughout the state – especially when there are known replacements for every use.

I urge a favorable report on SB345.

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