

**Department of Legislative Services**  
 Maryland General Assembly  
 2026 Session

**FISCAL AND POLICY NOTE**  
**First Reader**

House Bill 1315 (Delegate Pruski)  
 Environment and Transportation

**Department of the Environment - Vessel-Based Microplastic Particle Removal Technologies - Study**

This bill requires the Maryland Department of the Environment (MDE), in consultation with the Department of Natural Resources (DNR), to conduct a comprehensive study of technologies installed or used on vessels to capture or remove microplastic particles and assess their potential to reduce microplastic pollution in the Chesapeake Bay and its tributaries. The bill establishes requirements for the study and related requirements for MDE. MDE must submit an interim report to the Governor and the General Assembly by December 1, 2027, and a final report by July 1, 2028.

**Fiscal Summary**

**State Effect:** General fund expenditures increase by \$428,500 in FY 2027 and by \$444,300 in FY 2028. State revenues are not affected.

(in dollars)	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	428,500	444,300	0	0	0
Net Effect	(\$428,500)	(\$444,300)	\$0	\$0	\$0

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

**Local Effect:** It is assumed that any affected local entities can provide stakeholder input to MDE as needed using existing resources. Local revenues are not affected.

**Small Business Effect:** Minimal.

## Analysis

**Bill Summary:** The study must:

- identify, describe, and categorize technologies installed or used on vessels to capture or remove microplastic particles, including several specified types of devices, systems, and technologies;
- assess the technical performance of the technologies, as specified;
- evaluate the environmental and water quality benefits and drawbacks of using technologies installed or used on vessels to capture or remove microplastic particles in the Chesapeake Bay and its tributaries, including, among other things, the potential for supporting existing efforts to reduce plastic and microplastic pollution in watersheds, stormwater, and wastewater;
- analyze the practicality of large-scale or targeted use of technologies installed or used on vessels to capture or remove microplastic particles in the Chesapeake Bay and its tributaries, including, among other things, the use on workboats, research vessels, and other State-owned or locally owned vessels;
- assess the economic and implementation factors for using technologies installed or used on vessels to capture or remove microplastic particles, as specified;
- review regulations, permitting requirements, and policies impacting technologies installed or used on vessels to capture or remove microplastic particles, as specified; and
- identify data and research needs for technologies installed or used on vessels to capture or remove microplastic particles, as specified.

MDE must (1) review research, pilot projects, and technology inventories on microplastic removal in marine and estuarine waters, including those relating to technologies installed on or used with vessels and corresponding performance data; (2) assess opportunities for the State to host or participate in pilot or demonstration projects to test technologies installed on or used on vessels to capture or remove microplastic particles in the Chesapeake Bay; and (3) consult with DNR and other State agencies responsible for water quality, boating, fisheries, and Chesapeake Bay restoration.

MDE must also solicit input from stakeholders, including (1) manufacturers and distributors of outboard motors and technologies installed or used on vessels to capture microplastic particles; (2) recreational and commercial boat builders and dealers; (3) representatives of the charter boat and for-hire fishing industries; (4) marina operators and boating trade associations; (5) environmental and watershed advocacy organizations; (6) academic and research institutions; and (7) local governments and regional entities.

The interim report must include (1) a description of all technologies reviewed and preliminary findings on performance and potential environmental benefits; (2) an initial assessment of practicability, costs, and stakeholder input; and (3) identification of questions and data needs to be addressed in the remainder of the study.

The final report must include (1) the results of the study; (2) an analysis of the effect of technologies installed or used on vessels on microplastics pollution in the Chesapeake Bay and its tributaries; (3) recommendations for policy changes, pilot programs, funding mechanisms, or incentives to support the use of technologies installed or used on vessels to capture or remove microplastic particles where appropriate; and (4) any recommended statutory or regulatory changes to integrate such technologies into State water quality and Chesapeake Bay restoration programs.

**Current Law:** While State law does not include a comprehensive strategy for addressing microplastic pollution in the Chesapeake Bay or its tributaries – or any provisions specific to vessel-based microplastic particle removal technologies – DNR’s Watershed and Climate Services, which works to improve the health of Maryland’s watersheds and the Chesapeake Bay, is involved with efforts to address [marine debris](#). These efforts are supported by various State prohibitions in the Environment Article that aim to reduce plastics in the environment (one of the most pervasive forms of marine debris). Examples include the following prohibitions established under Title 9 of the Environment Article:

- Subtitle 20 prohibits the manufacture and sale of personal care products and over-the-counter drugs containing synthetic plastic microbeads.
- Subtitle 21, among other things, establishes a general prohibition on the sale of a plastic product that is labeled as biodegradable, degradable, decomposable, or any other term that implies that the product will break down, fragment, biodegrade, or decompose in a landfill or any other environment. Further, a person may not sell in the State (1) a plastic product that is labeled as compostable or home compostable unless the plastic product meets specified standards or (2) a film plastic product labeled as soil biodegradable ag mulch film or biodegradable mulch film unless the product meets specified standards.
- Subtitle 22 prohibits (1) a person from selling or offering for sale in the State an expanded polystyrene food service product and (2) a food service business or school from selling or providing food or beverages in an expanded polystyrene food service product (though MDE may grant to a food service a business or school a waiver from this prohibition under specified conditions).
- Subtitle 23 prohibits, with specified exceptions, a person from (1) knowingly and intentionally releasing, or causing to be released, a balloon into the atmosphere or (2) organizing or participating in a mass balloon release.

In addition to specific product bans and other efforts aimed at reducing plastics in the environment, Maryland’s Chesapeake Bay Cleanup Plan consists of five key elements that are designed to make concrete steps towards reducing pollution in the Chesapeake Bay: the Chesapeake Bay Total Maximum Daily Load (TMDL), Watershed Implementation Plans (WIPs), two-year milestones, best management practices, and Maryland’s tracking and accountability system. MDE has information about these efforts on its [website](#).

The TMDL sets the maximum amount of nutrient and sediment pollution the bay can receive and still attain water quality standards. It also identifies specific pollution reduction requirements; all reduction measures were required to be in place by 2025. WIPs developed by the bay jurisdictions detail the strategies and specific actions that are being implemented to reduce pollution. However, the TMDL and WIPs do not specifically address plastics pollution.

**State Expenditures:** MDE has determined that two regular full-time positions are needed to implement the bill. However, the Department of Legislative Services advises that the added responsibilities incurred by this legislation are not permanent and, thus, may be performed by contractual employees instead. Accordingly, general fund expenditures increase by \$428,509 in fiscal 2027, which accounts for the bill’s October 1, 2026 effective date, and by \$444,300 in fiscal 2028. This estimate reflects the cost of hiring two contractual natural resource planners to (1) hire and oversee a contractor to complete the comprehensive study and reports within the deadlines established by the bill; (2) conduct stakeholder outreach; and (3) generally facilitate the bill’s implementation. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses. It also includes \$300,000 in contractual services in both fiscal 2027 and 2028.

	<u><b>FY 2027</b></u>	<u><b>FY 2028</b></u>
Contractual Positions (New)	2.0	0.0
Salaries and Fringe Benefits	\$110,227	\$138,691
Contractual Services	300,000	300,000
Other Operating Expenses	<u>18,282</u>	<u>5,609</u>
<b>Total MDE Expenditures</b>	<b>\$428,509</b>	<b>\$444,300</b>

After fiscal 2028, State expenditures are not affected. Once the final report has been submitted (by July 1, 2028), the contractual employees and the contractor are no longer needed.

This estimate does not include any health insurance costs that could be incurred for specified contractual employees under the State’s implementation of the federal Patient Protection and Affordable Care Act.

DNR can consult with MDE as needed using existing budgeted resources.

**Additional Comments:** DNR works with the National Oceanic and Atmospheric Administration (NOAA) to implement the [Mid-Atlantic Marine Debris Action Plan](#). Using funding from NOAA, Maryland's Coastal Zone Management Program has assisted two projects directed toward preventing litter from single-use plastics.

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### **Additional Information**

**Recent Prior Introductions:** Similar legislation has not been introduced within the last three years.

**Designated Cross File:** None.

**Information Source(s):** Maryland Department of the Environment; Department of Natural Resources; University System of Maryland; Maryland Department of Agriculture; National Oceanic and Atmospheric Administration; Department of Legislative Services

**Fiscal Note History:** First Reader - March 5, 2026  
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