Pennsylvania House of Representatives Agriculture and Rural Affairs Committee

June 5, 2018

Testimony re: Chesapeake Bay Program Partnership Model Credit for SB 792

Chairman Causer, Chairman Pashinski, and Committee Members,

My name is Matthew Johnston, and I am the Senior Policy Analyst for the Chesapeake Bay Program Partnership and a non-teaching faculty member at the University of Maryland. My role at the Chesapeake Bay Program Partnership is to use our modeling tools to help stakeholders and jurisdictions across the Chesapeake Bay watershed analyze proposed strategies to reduce nutrient and sediment pollution to their local waters and to the Chesapeake Bay. In that role, I thank you for the opportunity to answer questions regarding how SB 792 could be credited by the Chesapeake Bay Program Partnership's Watershed Model for reductions in nutrient pollution to local Pennsylvania streams, rivers, and the Chesapeake Bay.

In 2013, the Chesapeake Bay Program Partnership approved modeled credits for a number of urban nutrient management practices. As written, SB 792 qualifies for two such practices.

First, the labeling restrictions described in § 6813 and application restrictions described in § 6852 would allow Pennsylvania to plan for a reduction in future fertilizer applications to, and pollution from, urban turf. Pennsylvania would then need to verify these planned reductions were realized in future years by providing the Chesapeake Bay Program Partnership with trends in non-farm fertilizer sales. If the trend in sales, combined with an estimate of urban turf acres, indicates fewer pounds of nutrients were applied per acre in some future year, then the modeled credit would continue. The tonnage reporting requirement in § 6816 will provide the needed data for Pennsylvania to verify these future reductions in nutrient applications.

Secondly, the record keeping requirements for certified applicators described in § 6841 would allow Pennsylvania to receive credit for urban nutrient management plans for every acre of turf receiving nutrients from a certified applicator.

If we assume that SB 792 will result in a 10 percent reduction in nitrogen application to urban turf, a 70 percent reduction in phosphorus application, and attain urban nutrient management plan credits across 10 percent of urban turf, then the Chesapeake Bay Program Partnership's Watershed Model estimates annual reductions of over 180,000 pounds of nitrogen and over 220,000 pounds of phosphorus pollution

to Pennsylvania streams within the Chesapeake Bay watershed.[1] To put these numbers in perspective, Pennsylvania would need to replant over 16,000 acres of forest to obtain similar nitrogen reductions, or over 240,000 acres of forest to obtain similar phosphorus reductions.[2]

Finally, many popular urban stormwater practices focus on controlling water volume and sediment pollution, rather than controlling nitrogen and phosphorus pollution. These two model credits for urban nutrient management could become important pollution reduction strategies not only for municipalities with municipal separate storm sewer system (MS4) permits, but also for municipalities within source water protection areas, and all other rural and suburban municipalities across Pennsylvania both inside and outside of the Chesapeake Bay Watershed.

Thank you again for the opportunity to address the Committee today, and I welcome any further questions you may have.

Sincerely,

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Senior Policy Analyst, Chesapeake Bay Program Office
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[1] This scenario was developed at the direction of Pennsylvania's Chesapeake Bay Phase III Watershed Implementation Plan (WIP) Stormwater Workgroup. Percent reductions in applications and urban nutrient management acres are the best estimates available to date that would need to be refined

[2] The Chesapeake Bay Program Partnership's Watershed Model estimates each acre of urban turf converted to forest could reduce 11.35 pounds of nitrogen and 0.9 pounds of phosphorus runoff to local, Pennsylvania streams.