



CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

Senate Bill 898

Nutrient Management – Tidal Buffer – Vegetative Buffers and Restriction on Fertilizer Application

Date: February 18, 2024

To: Education, Energy, and the Environment Committee

Position: **FAVORABLE**

From: Matt Stegman,
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Chesapeake Bay Foundation (CBF) **SUPPORTS** SB 898 which prohibits application of nutrients to farmland located within 100 feet of tidal waters, enhances State cost share for voluntary conservation practices within 100 feet of tidal waters, and financially compensates farmers when a buffer is created on land they rent. The bill strategically incentivizes conservation on a relatively small (less than one-fifth of one percent of Maryland farmland) number of acres near tidal water to maximize the value of public investment and minimize farmland loss elsewhere in the state.

Buffers Provide Essential Water Quality Benefits:

In Maryland, the Critical Area Law requires a minimum 100-foot buffer be established and maintained adjacent to most tidal waters to protect valuable natural resources from human disturbances. While this provision generally prohibits buildings and construction in the buffer, for agriculture, only a 25-foot vegetative filter strip is required (greater for steep slopes). Scientific studies show that wider buffers optimize water quality functions, and the Chesapeake Bay Program recently identified shallow water habitats as particularly important for sustaining the living resources the Bay restoration effort aims to protect.^{1 2}

Current nutrient application regulations permit fertilizers to be applied as close as ten feet to a waterway. SB 898 would require that nutrient application not occur within 100 feet of tidal waters. Agriculture activity can still take place within this 100 foot buffer, or farmers can choose to pursue incentives for various conservation practices. This aligns with scientifically-informed guidance and is consistent with how Maryland prevents nutrient loading on other land use types. The proposed policy would significantly reduce runoff or leaching of fertilizer nutrients, up to 80 percent of which are delivered to the Bay when applied within 1,000 feet of tidal water.³ Notably, USDA and USEPA recommend riparian buffers at least 100 feet in size to facilitate nutrient removal.⁴

Voluntary Programs Need a Boost for Greater Adoption:

The Tree Solutions Now Act of 2021 authorized up to \$2.5 million annually for the Maryland Department of Agriculture (MDA) to spend on tree planting for Bay restoration. In FY24, MDA reports that only \$264,531

¹ Walker *et al*, “Meta-analysis of nitrogen removal in riparian buffers”, J Environ Qual. 2007 Jun. Available [online](#).

² “A Comprehensive Evaluation of System Response (CESR)”. Available [online](#).

³ MDE, “Facts About: Nitrogen Discharge Limit for Large On-site System”. Available [online](#).

⁴ USDA “Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers”. Available [online](#).

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was awarded through the Conservation Reserve Enhancement Program (CREP) in signing bonuses, as directed by Tree Solutions Now, and \$457,248 was awarded as grants through MDA's Conservation Buffer Initiative (CBI, a program that funds planting grass as well as trees).⁵ In the first 3 years of the 10-year Tree Solutions Now program, MDA supported planting only 184,062 trees, which is less than 4% of the statewide goal of planting 5 million trees by 2031.⁶

The Chesapeake Bay Program's Scientific and Technical Advisory Committee's (STAC) has found that current programs designed to address nonpoint source pollution sectors like agriculture - the largest, manageable source of nutrients to the Bay - are not resulting in enough adoption of conservation practices. Limited participation in voluntary incentive programs, such as the CREP and CBI buffer programs administered through MDA, is described by STAC as a contributing factor that affects the ability of Bay states to secure the type and level of implementation necessary to achieve nonpoint source pollution reduction goals.⁷

SB 898 does two separate, but equally important, and mutually-reinforcing things: it increases the nutrient application setback near tidal waters and it provides enhanced financial incentives for conservation practices in that same area. While some farmers may choose to continue to grow crops in the area where nutrient application is prohibited, others will have the opportunity to adopt the types of conservation practices that best complement their operation and receive payments for them.

SB 898 Stretches Existing Conservation Dollars Further, Achieving Bay Health Goals:

The CESR report recommends targeting investment through new approaches that "must accelerate adoption of nutrient reduction practices in the locations with the greatest load reduction potential."⁸ SB 898 is consistent with this recommendation. For the 2,665 acres of Maryland farmland that is within 100 feet of tidal water the bill provides farmers and landowners up to 150% of installation expenses and an upfront bonus payment for voluntarily installation of fixed natural buffers, such as riparian buffers, tree plantings, riparian herbaceous cover, or wetland restoration.

Riparian tree buffers receive the highest per-acre bonus payment rate in the bill because they are widely understood to be among the most effective ways to control polluted runoff and improve water quality. If all farmland potentially impacted to the proposed fertilizer application setback were to be planted in trees, Bay nitrogen pollution would decrease an estimated 83,654 lbs./yr.⁹ Over 15,000 upland acres would be required to achieve the same reduction because trees planted as riparian streamside buffers are more than six times as effective at trapping nitrogen as trees planted elsewhere.

We are aware that actions in the Governor's proposed FY25 and the Budget Reconciliation and Financing Act would reduce the amount of funding available through Tree Solutions Now, it is our hope that funding can return to current levels in future years should program demand demonstrably increase. Even were that not to happen, the bill simply adds the incentives provided in the to the allowable uses of that funding source. The incentives can be successful at whatever level of funding the General Assembly is able to provide.

⁵ MDA. *Conservation Grants Fiscal Year 2024 Annual Report*. Available [online](#).

⁶ MDE. *Maryland's Five Million Trees Initiative*. Available [online](#).

⁷ CESR

⁸ CESR

⁹ Chesapeake Bay Program. *Chesapeake Assessment Scenario Tool*. Available [online](#).

Land Lease Farmers Have the Ability to Share in Conservation Incentives:

Close to half of Maryland's agricultural land is rented by farmers. Many conservation incentive programs confer benefits on the property owner, leaving a number of farmers behind and making participation in the programs less attractive. SB 898 recognizes this disparity and offers leased land operators an annual payment of at least \$150 per acre if a fixed natural buffer is installed on the land they rent. This provision reduces financial loss or hardship if farmland that a farmer manages for crops or livestock production is converted to conservation. It also encourages adoption of high-performing permanent buffers on nearshore property where risks to water quality are greatest.

The strategic, narrow fertilizer application prohibition in SB 898 coupled with healthy financial incentives for conservation in high-priority areas respond to the call for focused, policy-driven Bay restoration solutions. For these reasons, **CBF urges the Committee's FAVORABLE report on SB 898.**

For more information, please contact Matt Stegman, Maryland Staff Atto