

**SB0932 ShoreRivers.Testimony\_FAV .pdf**

Uploaded by: Annie Richards

Position: FAV



3/8/24

**Testimony in SUPPORT for SB0932 -  
Maryland Agricultural BMP Best in Show Program - Established**

To Chair Feldman and Members of the Committee,

Thank you for this opportunity to submit testimony in **SUPPORT**, for **SB0932** on behalf of ShoreRivers. ShoreRivers is a river protection group on Maryland's Eastern Shore with more than 2,500 members. Our mission is to protect and restore our Eastern Shore waterways through science-based advocacy, restoration, and education.

Our rivers are impaired by nitrogen, phosphorus, sediment, and bacteria. After 40 years of pollution reduction efforts in the Chesapeake Bay, our rivers and our communities are still falling short of the envisioned restoration goals. Scientists who advise on state clean-up efforts recently completed a study to understand why. The Chesapeake Bay Program's [CESR Report](#)—*A Comprehensive Evaluation of System Response*—outlines the following key points:

- **Runoff pollution in our rivers comes from only 5–20% of our land**—and we need to effectively target our restoration work on that land.
- **Nonpoint source pollution is our last and largest obstacle to meeting our restoration goals**—and agriculture is the largest nonpoint source in the Chesapeake watershed.
- **We need to increase our monitoring efforts to improve the efficacy of future restoration beyond 2025**—this will take funding and government support to implement effectively!
- **Restoration practices cannot keep pace with the imbalance of nutrients introduced to the watershed**—we need large-scale behavior change that will reduce the amount of nutrients introduced to the watershed.

To address recommendations within the CESR report, which will be pivotal in addressing nonpoint source pollution to accelerate water quality restoration across the state, **SB0932 will:**

- Provide increased funding for coordinated and targeted restoration practices across one or multiple agricultural operations;
- Prioritize state funds to support best management practices in locations most likely to have a short-term benefit to water quality, habitat, and public health; and
- Establish monitoring and verification requirements to evaluate the effectiveness of implemented projects, including impacts to resilience, nutrient reductions, and sediment reduction outcomes.

Following the recommendations of the CESR report beyond 2025 will mean a shift in goals and perspectives when engaging in water quality restoration. **SB0932** will direct cost share funds to projects that not only target areas of high nutrient delivery, but will prioritize projects that increase shallow water system responses and near-shore habitat—ultimately increasing pollution reduction outcomes, particularly in near-shore areas where impacts are most clearly seen and experienced by

**ShoreRivers**

Isabel Hardesty, Executive Director

Annie Richards, Chester Riverkeeper | Matt Pluta, Choptank Riverkeeper

Ben Ford, Miles Wye Riverkeeper | Zack Kelleher, Sassafras Riverkeeper

members of the public. **This is especially important as accelerated restoration is needed on farmland within the state's Critical Area.** According to a study by the Chesapeake Bay Foundation, there are 15,744 acres of crop and pasture land currently within the 300-foot buffer of the state's Critical Area. A full 81% of that farmland is found on Maryland's Eastern Shore, an area of the state that is both significantly under-treed, and disproportionately vulnerable to land subsidence and saltwater intrusion from climate change. This land also has the highest potential for nutrient delivery<sup>1</sup>: "In accordance with the Chesapeake Bay Watershed Implementation Plan, the standard nitrogen rate used to determine the nitrogen delivery rate to surface water is as follows: **(1) An 80% delivery rate in Critical Area;** (2) a 50% delivery rate within 1,000 feet from any perennial surface water; and (3) a 30% delivery rate from distances greater than 1,000 feet from any perennial surface." These nutrient loads can be further augmented from storm surge and rising tides. A recent study incorporated into the CESR report<sup>2</sup> estimated: "that the amount of dissolved inorganic N[itrogen] contributed during a seasonally high tide event in one Bay segment exceeded its annual N load allocation by 30%." Rising tides and increased storm surge due to climate impacts will continue to negatively affect our waterways, especially from nonpoint source land uses like agricultural operations.

On the Eastern Shore, agriculture is the dominant land use, which has undeniable impacts on our waterways. However, farmers are one of our greatest allies in restoration efforts, as just one person can positively impact hundreds, if not thousands, of acres. To invest in soil health is to invest in water quality, and this legislation creates a new avenue for farmers who are positioned to make the biggest and best impact to the Chesapeake and its tributaries while protecting their own investments and livelihoods. We thank Senator Elfreth for bringing this important legislation forward for the committee's review and we urge **a favorable report, for SB0932.**

Sincerely,  
**Annie Richards, Chester Riverkeeper** on behalf of [ShoreRivers](http://ShoreRivers.org).

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<sup>1</sup> <https://mde.maryland.gov/programs/pressroom/pages/1243.aspx>

<sup>2</sup> [A Comprehensive Evaluation of the Systems Response \(Macías-Tapia et al., 2021\).](#)



# **SB0932 Starkey Testimony.pdf**

Uploaded by: Brennan Starkey

Position: FAV

**BRENNAN STARKEY**  
**OLDFIELD POINT FARMS**

P.O. Box 250  
Galena, Maryland 21635

e.mail: [brennanstarkey@gmail.com](mailto:brennanstarkey@gmail.com)

Chair Feldman and Members of the Committee,

I appreciate the opportunity to submit testimony in SUPPORT of Senate Bill SB0932 as a farmer and conservationist. Oldfield Point Farms is a 1,400 acre contiguous farm bordered on three sides by water- the Sassafrass River to the North, Dyer Creek to the West, and Woodland Creek to the East. We grow a diverse variety of crops including spinach, lima beans, tomatoes, and sweet corn for freezer and canning processors and rotate those crops with soybeans, corn, wheat, and barley.

Early in my farming career I became painfully aware of the declining water quality seen in the Chesapeake Bay and Tributaries due to the overloading of nutrients and sediment, especially Nitrogen and Phosphorous. Agricultural operations were the largest nonpoint source contributors.

I was appointed by Governor Glendening to the Upper Eastern Shore Tributary Strategy Team in 1995. It was one of the first public/private partnerships of its kind. I became active in the Chester River Association and helped develop projects with farmers on the Eastern Shore to identify and implement practices which would reduce and capture nutrients. I was elected Chair of ShoreRivers during the merger of three watershed organizations and served in that position for six years as the organization grew. The Agricultural Program of ShoreRivers is widely recognized as one of the most effective groups working with the farming community to identify and implement restoration and nutrient reduction opportunities.

I've seen the tremendous amount of time, effort, and resources the State, the farming community, and private organizations have invested over the past 27 years to address nutrient loading. I personally live and work where land meets water. Our farming operation recently received the Cooperator of the Decade award from our County Soil Conservation District. We have planted over 200 acres of buffers and made changes in our operation to minimize the loss of nutrients.

The recent CESR Report presented by the Chesapeake Bay Program was discouraging and sobering. In spite of widespread adoption of cover crops, precision nutrient application, no-till planting, manure regulations, and enrollment in CRP agriculture remains the largest nonpoint source of nutrients in the Chesapeake watershed.

**SB 0932 will help accelerate restoration and reduction efforts in the most critical agricultural areas** – the shallow water and near shore farm land- by providing increased funding for coordinated and targeted restoration practices across one or multiple agricultural operations. Prioritizing state funds to support best management practices in locations most likely to have a short-term benefit to water quality, habitat, and public health will result in the greatest immediate impact.

**SB0932 will also encourage a more comprehensive approach to restoration and nutrient reduction to farmland in the Critical Areas** through coordination of different practices that will work in concert to achieve the highest reductions which will be verified through the monitoring components of the grant programs.

Farmers are proud to be the stewards of a large percentage of land in the state. On the Eastern Shore a large percentage of the Critical Area remains in farmland, much of it in Conservation Easements. Farmers have a unique connection to, and reliance on, the health of their soil and the fertility of their ground. In addition to the food and fiber produced, farms provide the habitat for pollinators, game species, amphibians, waterfowl and interior forest dwelling birds.

I am confident there will be a very positive response by the farming community to the opportunities for restoration and reduction presented in SB0932. I thank the Committee for their serious and thoughtful consideration of this Bill and strongly support a favorable report.

Sincerely,

Brennan Starkey

# **Arundel Rivers Testimony FAV SB0932 Best In Show.p**

Uploaded by: Matthew Johnston

Position: FAV



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21037

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[www.arundelrivers.org](http://www.arundelrivers.org)

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## Testimony in SUPPORT of SB0932 - Maryland Agricultural BMP Best in Show Program

Education, Energy, and the Environment Committee  
March 8, 2024

Dear Chair Feldman and members of the Committee,

Thank you for the opportunity to submit testimony in **SUPPORT OF SB0932** on behalf of Arundel Rivers Federation. Arundel Rivers is a non-profit organization dedicated to the protection, preservation, and restoration of the South, West and Rhode Rivers with over 3,500 supporters. Our mission is to work with local communities to achieve clean, fishable, and swimmable waterways for present and future generations.

Senate Bill 932 will enable the rapid deployment of a suite of water quality and habitat improvement practices across an agricultural operation. The bill recognizes that rapid and substantial improvements to our rural waterways requires a “whole-farm” approach rather than piecemeal implementation of one practice at a time across distant, unconnected operations. To date, such wholesale approaches have been difficult to implement as grant funding limits inherently limit the types and numbers of practices that can be implemented at once. This bill will allow non-profit organizations like Arundel Rivers the opportunity to explore and implement a menu of practices with our farmers that will transform water quality and habitat on their operations for decades to come.

Additionally, Arundel Rivers strongly supports the inclusion of land conservation in the menu of eligible practices for this new program. As organizations like ours help to deploy millions of trees and create new forests and wetlands across the state to meet our water quality and habitat creation goals, it is critical that we also protect pockets of habitat that already provide valuable ecosystem services.

For these reasons, Arundel Rivers Federation respectfully requests a **FAVORABLE REPORT on SB0932.**

Sincerely,

A handwritten signature in black ink that reads "Matt Johnston".

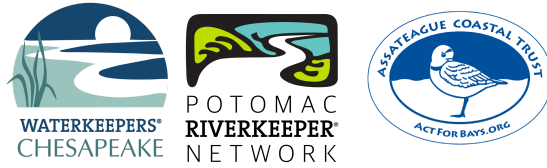
Matt Johnston  
Executive Director  
Arundel Rivers Federation



**FAV\_SB932 Best in Show BMPs.docx.pdf**

Uploaded by: Robin Broder

Position: FAV



## **SB932 - Maryland Agricultural BMP Best in Show Program – Established**

Hearing Date: Friday, March 8, 2024

### **Position: FAVORABLE**

To Chair Feldman and Members of the Education, Energy and the Environment Committee:

Thank you for this opportunity to submit FAVORABLE testimony for SB932 with sponsor amendments on behalf of Waterkeepers Chesapeake and the below signed Waterkeeper organizations. Waterkeepers Chesapeake is a coalition of Waterkeeper programs in the Chesapeake and Coastal Bays region that work with their communities to protect local waterways.

The Chesapeake Bay Program's [CESR Report](#)—A Comprehensive Evaluation of System Response demonstrates that the region is falling short on restoration goals and we need bold, innovative and targeted strategies to address nutrient, sediment and bacteria pollution loads. The CESR report outlines the following key points:

- Runoff pollution in our rivers comes from only 5–20% of our land—and we need to effectively target our restoration work on that land.
- Nonpoint source pollution is our last and largest obstacle to meeting our restoration goals—and agriculture is the largest nonpoint source in the Chesapeake watershed.
- We need to increase our monitoring efforts to improve the efficacy of future restoration beyond 2025—this will take funding and government support to implement effectively.
- Restoration practices have not kept pace with the imbalance of nutrients introduced to the watershed—we need large-scale behavior change that will reduce the amount of nutrients introduced to the watershed.

To address recommendations within the CESR report, which will be pivotal in addressing nonpoint source pollution to accelerate water quality restoration across the state, SB932 will:

- Provide increased funding for coordinated and targeted restoration practices across one or multiple agricultural operations;
- Prioritize state funds to support best management practices in locations most likely to have a short-term benefit to water quality, habitat, and public health;
- Establish monitoring and verification requirements to evaluate the effectiveness of implemented projects, including impacts to resilience, nutrient reductions, and sediment reduction outcomes;
- Establish a process for scoring projects based on their public health and environmental justice benefits.

Following the recommendations of the CESR report, SB932 will direct cost share funds to projects that not only target areas of high nutrient delivery, but will prioritize projects that increase shallow water system responses and near-shore habitat—ultimately increasing pollution reduction outcomes, particularly in near-shore areas where

impacts are most clearly seen and experienced by members of the public. The sponsor amendments that reduce the number of required best management practices from five to three will allow smaller farms, including urban farms, to apply; source \$2 million for the program through the Clean Water Commerce Account, instead of the Bay Restoration Fund, will introduce new money for cost share programs, rather than redirect existing funds; and prioritize farm land in Critical Areas will address land threatened by rising tides and increased storm surge due to climate impacts.

We would like to highlight the significance of one of the practices eligible for receiving incentive payments -- “vegetative environmental buffers” and other projects that reduce the deposition to land and water of nutrients from the air. According to recent estimates, there are millions of pounds of a form of nitrogen that are deposited to the land and waters of the Eastern Shore with virtually no controls in place today. Yet the solution to this massive problem is as cheap as planting certain species of trees, shrubs, and grasses in just the right locations to intercept those gaseous emissions and begin soaking up those nutrients. By our estimate there is no other water pollution control project or practice with a greater cost-effectiveness value than these. More importantly, while these vegetative buffers reduce nutrient runoff to the Chesapeake and Coastal Bays and their tributaries, they also substantially reduce hazardous air pollutants in certain communities, especially the overburdened communities in places like Somerset, Wicomico, and western Worcester counties that are often surrounded by high concentrations of ammonia and particulate matter pollution.

Another innovative practice on the list of priorities is mussel restoration. Sixteen species of freshwater mussels are native to Maryland rivers, and once existed in the millions, similar to the oyster populations in the Chesapeake Bay. Like oysters, mussels are effective at removing nutrients and toxins, filtering out sediments and improving water quality. Scientific opinion is unanimous that mussel recovery is an important part of improving the water quality in the Chesapeake Bay and its tributaries.

To invest in soil health and agricultural practices that reduce runoff is to invest in water quality. This legislation creates an innovative and targeted avenue for farmers to make the biggest and best impact to the Chesapeake and its tributaries while protecting their own investments and livelihoods. We urge a favorable report for SB932.

Sincerely,  
Robin Broder  
Deputy Director  
Waterkeepers Chesapeake  
[robin@waterkeeperschesapeake.org](mailto:robin@waterkeeperschesapeake.org)

Betsy Nicholas  
VP of Programs  
Potomac Riverkeeper Network

Taylor Swanson  
Assateague Coastkeeper  
Assateague Coastal Trust

**SB 932 - Elfreth Testimony.docx.pdf**

Uploaded by: Sarah Elfreth

Position: FAV

SENATOR SARAH ELFRETH  
*Legislative District 30*  
Anne Arundel County



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Budget and Taxation Committee

*Subcommittees*

Capital Budget

Pensions

Chair, Public Safety,  
Transportation, and Environment

Joint Committee on the Chesapeake and  
Atlantic Coastal Bays Critical Area

Chair, Joint Subcommittee on  
Program Open Space/Agricultural  
Land Preservation

THE SENATE OF MARYLAND  
ANNAPOLIS, MARYLAND 21401

March 8, 2024

**Testimony in Favor of SB 932**  
**Best In Show**

Chairman Feldman, Vice-Chair Kagan, and members of the Education, Energy, and the Environment Committee, I respectfully request a favorable report of Senate Bill 932 - Best In Show - to leverage State funding to its fullest potential by incentivizing multiple environmental interventions on agricultural land.

In May 2023, the Scientific and Technical Advisory Committee of the Chesapeake Bay Program published the Comprehensive Evaluation of System Response (CESR) report<sup>1</sup>. Authored by Dr. Denise Wardrop, Dr. Kurt Stephenson, and over 80 scientists from across the watershed, the CESR report investigated the progress, successes, and issues related to the health of the Chesapeake Bay. The report noted that while there has been progress made in the decades since the first Bay agreement, our efforts are falling short in meeting our goals.

The report noted that agriculture is the largest remaining source of nutrient loads to the Bay, including increased dissolved phosphorus levels in river systems surrounding the Bay. Livestock impact these nutrient loads significantly, particularly phosphorus, and according to scientists, traditional interventions like cover crops and no-till do not significantly alter inputs. Growing populations have exacerbated environmental degradation through development as well as increasing the need for food, leading to expansion of agricultural land to grow more crops and support livestock<sup>2</sup>. The Food and Agriculture Organization of the United Nations reported in 2023 that agricultural expansion is responsible for nearly 90% of worldwide deforestation, making the industry a leading driver of biodiversity and habitat loss. Their report presented a critical question - **“How can agriculture continue to feed growing populations while contributing to the urgent restoration of the planet's ecosystems?”**<sup>3</sup>

While the findings of the CESR report are alarming, Maryland's agricultural community responded with great urgency to the opportunities ahead. The report includes recommendations to ensure policy matches with these scientific findings. One recommendation made by scientists in the report calls for a focus on better targeting of and incentivizing interventions. “Additional funding alone is unlikely to achieve desired nutrient and sediment reductions,” the CESR report explains. “Achieving and sustaining substantial future pollutant reductions will require a willingness to develop and adopt new implementation approaches and technologies.” **The call to action is clear - we needed to get creative, think bigger, and target better.** SB 932 is designed to do just that.

<sup>1</sup> <https://www.chesapeake.org/stac/wp-content/uploads/2023/05/CESR-Executive-Summary.pdf>

<sup>2</sup> <https://ugc.berkeley.edu/background-content/population-growth>

<sup>3</sup> <https://www.fao.org/family-farming/detail/en/c/1646202/>

**Senate Bill 932 establishes the Best In Show Program within the Maryland Department of Agriculture to incentivize the implementation of multiple Best Management Practices (BMPs) on Maryland's farmland.** The Anne Arundel Soil Conservation District describes agricultural BMPs as “tools that farmers can use to reduce soil and fertilizer runoff, properly manage animal waste, and protect water and air quality on their farms while achieving multiple positive environmental outcomes. These tools often improve a farmer’s bottomline as well by reducing operating costs”<sup>4</sup>. SB 932 empowers MDA to address emerging environmental concerns by utilizing the newest science to target high priority BMPs in the watersheds that require the most attention. The bill takes note of high priority BMPs based upon the findings of the CESR report, including natural filters, vegetative environmental buffers, wildlife and pollinator habitat, shallow water and aquatic organism habitat, agricultural land transition practices, and agricultural ditch management practices. By leaning on the newest available science, regularly assessing emerging environmental concerns, and focusing efforts on the most pressing interventions, Maryland farms can be sure that their efforts have the greatest environmental impact.

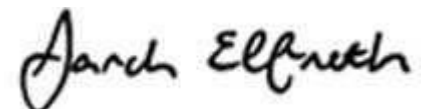
**Senate Bill 932 leverages existing funding for agricultural and environmental conservation by establishing a grant program to incentivize holistic approaches on agricultural land.** The program establishes a Maryland Agricultural BMP Best In Show Account for Fiscal Years 2026 through 2030 from which competitive grant funds will be disbursed. State funds may be allocated to this account from the Bay Restoration Fund, Chesapeake And Atlantic Coastal Bays 2010 Trust Fund, Clean Water Commerce Account, and any other agricultural cost-share funding. This funding will be allocated to projects which fall under the scope of the original funding source while being applied to the related BMPs under the grant program. This approach ensures that State funds are used to get the greatest possible outcomes with the largest environmental impact.

**Senate Bill 932 targets interventions to support communities overburdened by pollution.** The CESR report expressed concern for “regional mass imbalance” occurring in areas where nutrient pollutants are building up faster than they can be taken out through the ecosystem, overburdening communities and contributing to public health challenges. Communities in Somerset, Wicomico, and Western Worcester are negatively impacted by high concentrations of ammonia and particulate matter pollution in the air as a result of increasing numbers of livestock. These pollutants can be mitigated through targeted BMPs. SB 932 requires that MDA, DNR, and MDE develop a publicly available digital map indicating which areas of Maryland are subject to a regional mass imbalance, consequently overburdened, and are of highest priority for interventions through the Best In Show program. By closely monitoring nutrient outputs to identify concentrations of pollution, funding and intervention can be prioritized and targeted most effectively.

Senate Bill 932 has been a wonderfully collaborative effort among legislators, State agencies including the Maryland Department of Agriculture, Maryland Department of Natural Resources, Maryland Department of the Environment, and the agricultural community to ensure that this bill is both innovative and implementable.

I urge a favorable report on Senate Bill 932.

Sincerely,



Senator Sarah Elfleth  
District 30

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<sup>4</sup> <https://www.annearundelscd.org/agriculture/best-management-practices/>

**SB 0932.pdf**

Uploaded by: Taylor Swanson

Position: FAV



# Assateague Coastal Trust, Inc.

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[mail@ACTforBays.org](mailto:mail@ACTforBays.org)

## **SB 0932 – Maryland Agricultural BMP Best in Show Program - Established March 7, 2024**

**Position: Favorable**

I am writing to express my strong **SUPPORT** for the **SB0932** Maryland Agricultural BMP Best in Show Program. This bill aims to prioritize grant funding of agricultural pollution control projects or “best management practices” (BMPs) administered by the Department of Agriculture to best serve the state's goals for nutrient pollution reductions.

**In both the Coastal Bays and Chesapeake regions of Maryland a failure to reach restoration goals has highlighted a necessity for re-evaluation of nutrient reduction programs, particularly pertaining to the Chesapeake Bay 2025 restoration target.** In the Chesapeake region, a recent groundbreaking scientific assessment, called the Comprehensive Evaluation of System Response, or “CESR”, contained numerous findings and recommendations. Several of these Chesapeake Bay lessons, detailed below, are equally applicable to the nutrient pollution issues faced in Maryland’s Coastal Bays watersheds and highlight a necessity for statewide reform of allocated resources and funding for agricultural BMPs.

**One major conclusion drawn out in the CESR report is the current failures of untargeted implementation and funding of BMPs.** The report highlights a necessity for strategic implementation of these practices to maximize nutrient (nitrogen and phosphorus) reductions. The failures of these pollution mitigation practices have led to the build-up of excess nutrients entering our waterways.

**This bill aims to address the major flaws of “untargeted” restoration efforts found in the CESR report and represents a major milestone in pursuit of effective and cost-effective strategies for addressing Maryland’s water quality issues, if fully implemented.** This bill aims to achieve these reductions through use of incentive payments to farmers, landowners, and/or their contractors for effective projects which maximize pollution reduction capability, ecosystem resilience, and public health protection.

**This legislation will help to address unaccounted for sources of airborne nutrients.** According to recent estimates from the Environmental Integrity Project, millions of pounds of airborne nutrients, in the form of ammonia, are being deposited to the land and waters of the Eastern Shore with little-to-no control in place. However, despite the severity of the issue, solutions to this problem are cheap. Proper installation and maintenance of vegetative buffers consisting of trees, shrubs, and grasses can intercept those gaseous emissions, capturing those nutrients before deposition onto the landscape. There are few water pollution control projects or practices with a greater cost-effectiveness value than these.



**MISSION:** Working with diverse community partners, we protect and defend the health of Delmarva’s waters through advocacy, education, science, and the enforcement of clean water laws.

**ACT is a 501(c)3 Non-profit Organization – Please consider donating by scanning here.**



**Additionally, these vegetative buffers reduce on-land nutrient runoff to the Chesapeake and Coastal Bays waters, stabilize soils, and substantially reduce hazardous air pollutants in certain communities**, especially in overburdened Eastern Shore communities in Somerset, Wicomico, and western Worcester counties that are often surrounded by high concentrations of ammonia and particulate matter pollution.

This program is especially feasible for implementation given improvements in restoration science methodologies and major advancements in modeling tools.

In conclusion, I urge your **SUPPORT** for **SB0932** Maryland Agricultural BMP Best in Show Program. By enacting this legislation, we can take meaningful steps towards the strategic improvement of Maryland's water quality.

**Taylor Swanson,**

Assateague Coastkeeper, on behalf of Assateague Coastal Trust.

# **SB 932 Maryland Agricultural BMP Best in Show Prog**

Uploaded by: Cait Kerr

Position: FWA

**Friday, March 8, 2024**

**TO:** Brian Feldman, Chair of the Senate Education, Energy, and the Environment Committee, and Committee Members

**FROM:** Cait Kerr, The Nature Conservancy, State Policy Manager; Michelle Dietz, The Nature Conservancy, Director of Government Relations

**POSITION:** Support SB 932 Maryland Agricultural BMP Best in Show Program - Established

The Nature Conservancy (TNC) supports with amendments SB 932 offered by Senator Elfreth. TNC is a global conservation organization working to conserve the lands and waters on which all life depends. In Maryland, our work focuses on delivering science-based, on-the-ground solutions that secure clean water and healthy living environments for our communities, reducing greenhouse gas emissions and increasing resilience in the face of a changing climate. Our Regenerative Agriculture program team focuses on supporting an agricultural economy where farms provide healthy food, clean water, are resilient to climate change and support a healthy Chesapeake Bay where people and nature thrive.

SB 932 will establish the Maryland Agricultural BMP Best in Show Program to provide and prioritize funding to incentivize using best management practices in agricultural operations to produce cost-effective environmental, social, resiliency, and health benefits. These benefits include improved water quality, protections for living resources, and better human and environmental health.

The Chesapeake Bay's health is intricately linked to the health of more than 83,000 farms that operate in its watershed. Fertilizers are key to growing our food, but when lost from farm fields, fertilizers contribute excess nutrients to the Bay's waterways, degrading water quality and harming aquatic life, including fish, oysters, crabs, and underwater grasses. Adding to this challenge, climate change is making fertilizer management even more difficult due to heavier rain events and prolonged droughts. Working alongside a diverse population of agricultural producers—from small to large scale—is critical to achieving TNC's central strategies of infield nutrient management and edge of field/downstream habitat restoration.

In the past 30 years, farmers have significantly increased the amount of food produced on every acre while also reducing the amount of nutrients making it to the Bay. To build on this progress, farmers will need to adopt more advanced nutrient management practices (e.g., precision use of fertilizer), to accelerate Bay restoration, increase climate resiliency, and improve the economic sustainability of farms. TNC helped establish the Mid Atlantic 4R Nutrient Stewardship Association—a collaboration of agribusinesses, government agencies, researchers, and conservation groups—to increase the adoption of these practices. Our Association's shared goal is to see 2 million acres of cropland in the Bay watershed adopt climate-smart nutrient, soil, and water management practices. SB 932 aims to increase funding for these types of practices; however, we would like to respectfully request amendments that we believe would increase the program's success.

**Recommended Amendments: (Page 6-7, lines 31 and 1-14)**

**(II) PRIORITY BEST MANAGEMENT PRACTICES INCLUDE:**

- 1. VEGETATIVE ENVIRONMENTAL BUFFERS, HEDGEROWS, WINDBREAKS, OR OTHER PRACTICES DESIGNED TO REDUCE THE TRANSPORT OF AIR EMISSIONS AND DEPOSITION;**
- 2. STREAM EXCLUSION FENCING;**
- 3. RIPARIAN TREE PLANTING AND OTHER HIGH-IMPACT 3 FIXED NATURAL FILTER PRACTICES AS DEFINED IN § 8-701 OF THIS ARTICLE;**
- 4. WETLAND RESTORATION OR ESTABLISHMENT;**
- 5. LAND RETIREMENT AND CONSERVATION;**
- 6. SMALL-SCALE ~~URBAN~~<sup>(Amendment 1)</sup> AGRICULTURAL PRACTICES;**
- 7. AGRICULTURAL LAND TRANSITION PRACTICES;**
- 8. MUSSEL RESTORATION;**
- 9. BIORETENTION; ~~AND~~**
- 10. AGRICULTURAL DITCH MANAGEMENT PRACTICES, INCLUDING ~~DENITRIFYING BIOREACTORS~~ PRECISION WATER MANAGEMENT, THAT ACHIEVE CONSERVATION BENEFITS.<sup>(Amendment 2)</sup> ~~AND~~**
- 11. PRECISION NUTRIENT MANAGEMENT<sup>(Amendment 3)</sup>**

**Amendment 1:** By removing “urban” this program can become accessible to and inclusive of small farms in other locations.

**Amendment 2:** Denitrifying bioreactors has proven not to be a cost-effective practice. Instead, TNC recommends adding language directing these practices to achieve conservation benefits and recognizing precision water management, which improves yields and reduces nutrient loss by maintaining ideal soil moisture conditions, as an example of one of these practices.

**Amendment 3:** Precision nutrient management is a priority best management practice that is currently missing from this bill. Precision nutrient application, the core premise behind “4R” nutrient management, aims to match fertilizer applications to crop needs. The “4Rs” are: using the right source of fertilizer, applied at the right time, right rate, and right place. Applying just what the plants need when they need it means fewer nutrients leaving the field and savings for farmers.

TNC thanks Senator Elfreth for introducing this bill and respectfully requests your consideration for our amendments. We believe these amendments would make this program more accessible to small farms across Maryland, as well as increase the cost-effectiveness and success rates for the bill’s priority BMPs in achieving their intended environmental, social, resiliency, and health benefits.

**Therefore, we urge a favorable with amendments report on SB 932.**

**SB 932 - CBF - FWA.pdf**

Uploaded by: Doug Myers

Position: FWA



# CHESAPEAKE BAY FOUNDATION

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*Environmental Protection and Restoration  
Environmental Education*

## **Senate Bill 932**

Maryland Agricultural BMP Best in Show Program – Established

Date: March 8, 2024  
To: Education, Energy, and the Environment Committee

Position: **Favorable With Amendment**  
From: Doug Myers  
Maryland Senior Scientist

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Chesapeake Bay Foundation (CBF) **SUPPORTS SB 932 with amendments offered by the sponsor.** The bill targets \$5 Million from existing fund sources to maximize the effectiveness of multiple agricultural best management practices to where they will have the most benefit for water quality and other ecosystem services.

The Chesapeake Bay Program's Scientific and Technical Advisory Committee recently released a report entitled Comprehensive Evaluation of System Response ([CESR](#)) which critically evaluated the effectiveness of agricultural Best Management Practices as insufficient to address pollutant loading to the Bay. SB 932 addresses the CESR recommendations on focusing investments to shallow water areas that are likely to show a more rapid response and be more visible to human populations. CBF, Shore Rivers, and other partners have been working with Department of Agriculture to accomplish these goals through administrative means but SB 932 provides needed emphasis and funding clarification that a targeted approach is required.

SB 932 will support urban agriculture and underserved communities by allocating resources towards implementing Best Management Practices, which are vital for improving environmental quality and reducing pollution in urban areas. By prioritizing BMPs, such as vegetative buffers and urban stormwater management systems, SB 932 will enhance the health and resilience of these communities while addressing environmental challenges and injustices effectively.

**CBF urges the Committee's FAVORABLE WITH AMENDMENT report on SB 932.**

For more information, please contact Matt Stegman, Maryland Staff Attorney, at [mstegman@cbf.org](mailto:mstegman@cbf.org).

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The Chesapeake Bay Foundation (CBF) is a non-profit environmental education and advocacy organization dedicated to the restoration and protection of the Chesapeake Bay. With over 200,000 members and e-subscribers, including 71,000 in Maryland alone, CBF works to educate the public and to protect the interest of the Chesapeake and its resources.

# **Senate Bill 932 - Maryland Agricultural BMP testim**

Uploaded by: Jen Nelson

Position: INFO



March 8, 2024

The Honorable Brian Feldman, Chair  
Senate Education, Energy, and the Environment Committee

**Re: Senate Bill 932 – Maryland Agricultural BMP Best in Show Program - Established**

Position: **Informational**

Chair Feldman & Committee Members:

On behalf of the Maryland Association of Soil Conservation Districts (MASCD) I am providing information regarding the establishment of a Best in Show – BMP Program within the Department of Agriculture (MDA). Soil Conservation Districts serve as trusted advisors to farmers, assisting them in developing Soil Conservation and Water Quality Plans tailored to their specific needs, local environmental conditions, and resource concerns. This personalized approach ensures that each farming operation can effectively address its goals and capacity while contributing to broader conservation objectives. Over the years, the state has made significant investments in both technical and financial assistance to enhance water quality in the Chesapeake Bay and implement practices outlined in our Watershed Implementation Plan (WIP).

In coordination with the Maryland Department of Agriculture, Maryland's Soil Conservation Districts have been successful in their recent efforts to expand the number of staff dedicated to conservation delivery and have bolstered the capacity to write plans and implement practices, thereby advancing progress toward WIP goals. Maryland's Conservation Grants Programs have proven to be a successful model of voluntary conservation, combining a science-based approach with multiple options for financial assistance. These programs offer simplicity and flexibility, resulting in some of the highest Best Management Practices (BMP) adoption rates in the country.

As we work towards the establishment of a Best in Show Program, it is essential to recognize the continued reliance of farmers on our Soil Conservation Districts for guidance on financial assistance options and navigating program requirements. While our current capacity is adequate to address existing workload demands, we anticipate that applicants interested in the new program may require additional assistance in fulfilling responsibilities that exceed our current capacity and skillsets. The Maryland Association of Soil Conservation Districts (MASCD) fully supports efforts to incorporate recommendations from the scientific community while maintaining the qualities that have made existing programs successful. This collaborative approach ensures that our conservation efforts remain effective and sustainable in the long term.

Thank you for your kind consideration and attention to this legislation.

Respectfully Submitted,

Jen Nelson, Executive Director  
Maryland Association of Soil Conservation Districts