REPORT OF THE SECRETARY OF AGRICULTURE AND FORESTRY AND THE SECRETARY OF NATURAL AND HISTORIC RESOURCES

PROGRESS REPORT OF THE CHAPTERS 735 AND 736 (2023) STAKEHOLDER ADVISORY GROUP

TO THE GOVERNOR, THE CHAIRMAN OF THE HOUSE COMMITTEE ON AGRICULTURE, CHESAPEAKE, AND NATURAL RESOURCES, AND THE CHAIRMAN OF THE SENATE COMMITTEE ON AGRICULTURE, CONSERVATION AND NATURAL RESOURCES

COMMONWEALTH OF VIRGINIA
RICHMOND
JULY 2025

July 1, 2025

The Honorable Glenn Youngkin
Governor of Virginia
1111 East Broad Street
Richmond, Virginia 23219

The Honorable David W. Marsden, Chair
Senate Committee on Agriculture, Conservation and Natural Resources
Post Office Box 10889
Burke, Virginia 22009

The Honorable Alfonso H. Lopez, Chair
House Committee on Agriculture, Chesapeake and Natural Resources
Post Office Box 40366
Arlington, Virginia 22204

Dear Governor Youngkin, Senator Marsden, and Delegate Lopez:

Section 62.1-44.19:2 of the *Code of Virginia* directs the Secretary of Agriculture and Forestry and the Secretary of Natural and Historic Resources to convene a stakeholder advisory group that reviews "annual progress and make recommendations towards the implementation of the Commonwealth's agricultural commitments" in the Phase III Chesapeake Bay Watershed Implementation Plan. The second enactment clause of Chapters 735 and 736 of the 2023 Acts of Assembly requires the stakeholder advisory group to submit a first annual progress report due on July 1, 2024; thereafter, all progress reports are due on an annual schedule to be determined by the Group. The third enactment clause of these Chapters require the Secretary of Agriculture and Forestry and Secretary of Natural and Historic Resources to review this report, in addition to other available information, "no later than August 1, 2025, …to determine in their judgement whether work accomplished to date as well as planning and resource allocation are sufficient to substantially reach the allocated goals by July 1, 2028, and whether additional initiatives or resources or both will be necessary to continue an incentive-based effort."

We are pleased to present this progress report on behalf of the stakeholder advisory group.

If you have any questions regarding this report or require any additional information, please do not hesitate to contact us.

Respectfully submitted,

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Matthew J. Lohr
Secretary of Agriculture and Forestry

Preface

This report has been prepared in accordance with the requirements established in the second enactment clause of Chapters 735 and 736 of the 2023 Acts of Assembly. The enactment clause states:

" 2. That the stakeholder advisory group (the Group) created by the Secretary of Agriculture and Forestry and the Secretary of Natural and Historic Resources pursuant to § 62.1-44.119:2 of the Code of Virginia, as created by this act, shall make recommendations to the Governor and the Chairmen of the House Committee on Agriculture, Chesapeake and Natural Resources and the Senate Committee on Agriculture, Conservation and Natural Resources to ensure that all of the Commonwealth's agricultural sector commitments are achieved in accordance with the Chesapeake Bay Total Maximum Daily Load Phase III Watershed Implementation Plan. The Group shall develop a year-to-year timeline for achieving specific metrics for the achievement of the Commonwealth's agricultural sector commitments, including the coverage of a sufficient portion of Chesapeake Bay cropland by nutrient management plans or the installation of a sufficient number of livestock stream exclusion practices, in the Chesapeake Bay Total Maximum Daily Load Phase III Watershed Implementation Plan. Such timeline shall include specific annual percentages for nutrient management plan and stream exclusion adoption to meet the requirements of the Phase III Watershed Implementation Plan. The year-to-year timeline for achieving specific metrics shall be used to determine reasonable progress per § 62.1-44.119:4 of the Code of Virginia, as created by this act. The Group shall include representatives from the Department of Conservation and Recreation, soil and water conservation districts, the Virginia Farm Bureau Federation, the Virginia Agribusiness Council, the Shenandoah Riverkeepers, the Chesapeake Bay Commission, the Chesapeake Bay Foundation, the James River Association, the Virginia Cooperative Extension, the Virginia Cattlemen's Association, the Virginia Association of the Commissioners of the Revenue, and the Virginia Association of Counties. The Group shall also include two legislative members, one each from the Senate and the House of Delegates appointed by the Senate Committee on Rules and the Speaker of the House of Delegates, respectively. Such legislative members shall be members of the Virginia delegation of the Chesapeake Bay Commission. A preliminary report from the Group shall be due on December 1, 2023. The first annual report for the Group shall be due on July 1, 2024, and include the timeline with specific metrics. Thereafter, the progress report shall be due on an annual schedule to be determined by the Group.

3. That the Secretary of Agriculture and Forestry and the Secretary of Natural and Historic Resources shall, no later than August 1, 2025, jointly review the July 1, 2025, report of the Group established by the second enactment of this act as well as other relevant information at their disposal and together determine in their judgment whether work accomplished to date as well as planning and resource allocation are sufficient to substantially reach the allocated goals by July 1, 2028, and whether additional initiatives or resources or both will be necessary to continue an incentive-based effort.

The members of the stakeholder advisory group included:

The Honorable Stefanie K. Taillon, Secretary of Natural and Historic Resources

The Honorable Matthew J. Lohr, Secretary of Agriculture and Forestry

The Honorable Richard H. Stuart, Senate of Virginia

Mr. Matthew Wells, Department of Conservation and Recreation

Dr. Kendall Tyree, Virginia Association of Soil and Water Conservation Districts

Mr. Wayne Pryor, Virginia Farm Bureau Federation

Mr. Mark Frondorf, Shenandoah Riverkeeper

Mr. Jay Ford, Chesapeake Bay Foundation

Dr. Mike Gutter, Virginia Cooperative Extension

Mr. James Timberlake, II, Virginia Association of the Commissioners of the Revenue

Ms. Lindsay Reames, Virginia Agribusiness Council

Ms. Adrienne Kotula, Chesapeake Bay Commission

Mr. Tom Dunlap, James River Association

Mr. Jim Riddell, Virginia Cattlemen's Association

Mr. Jason Bellows, Virginia Association of Counties

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Executive Summary

Section 62.1-44.119:2 of the *Code of Virginia* directs the Secretary of Agriculture and Forestry and the Secretary of Natural and Historic Resources to convene a stakeholder advisory group (Group) that reviews "annual progress and make recommendations towards the implementation of the Commonwealth's agricultural commitments" in the Phase III Chesapeake Bay Watershed Implementation Plan (WIP). The second enactment clause of Chapters 735 and 736 requires the Group to submit the first annual report on July 1, 2024. The third enactment clause requires

> "the Secretary of Agriculture and Forestry and the Secretary of Natural and Historic Resources shall, no later than August 1, 2025, jointly review the July 1, 2025, report of the Group established by the second enactment of this act as well as other relevant information at their disposal and together determine in their judgment whether work accomplished to date as well as planning and resource allocation are sufficient to substantially reach the allocated goals by July 1, 2028, and whether additional initiatives or resources or both will be necessary to continue an incentive-based effort."

Over the last year, the Group has prioritized the continued implementation of the recommended strategies, coordinating efforts with partners to increase producer participation in the voluntary initiatives, and collaborating with Virginia Cooperative Extension to develop a survey to capture data related to the implementation of best management practices carried out at the producer's own expense.

Priorities for next progress report

Over the next year, the Group will continue to discuss ways to encourage and expedite the development of nutrient management plans for producers and to increase the implementation rates of livestock stream exclusion practices. The recommendations developed during these discussions will provide additional direction and guidance to ensure the Commonwealth meets its WIP commitments.

The Group will also focus on closely examining the existing programs and incentives currently being implemented. Offering increased financial incentives for all livestock stream exclusion practices, such as providing 100 percent of the cost to install those practices, could be considered. Providing additional funding for continued conservation initiative practices (CCIs) may also be an option to assist producers with maintaining exclusion practices. Other topics to be discussed include supply chain investment and how to incentivize and develop new partnerships to assist producers, as well as encouraging new innovative strategies.

1. Background and Progress Made Since 2017

Since 2017, the Commonwealth has made significant progress towards achieving substantial reductions in nutrient and sediment loads. In its Phase III WIP, there is a heavy reliance on the agricultural sector to achieve the water quality objectives. Based on the levels of best management practice implementation reported to the U.S. Environmental Protection Agency (EPA) in the 2017 progress reports, the Commonwealth needs to reduce 7.4 million pounds of nitrogen from agricultural sources to reach its WIP III commitment. Similarly, reductions of 520,000 pounds of phosphorus and 207 million pounds of sediment need to be achieved.

Background

Watershed Implementation Plans (WIPs) serve as roadmaps for how Chesapeake Bay (Bay) states and the District of Columbia, in partnership with federal and local governments, will attain the Bay Total Maximum Daily Load (TMDL). The TMDL is designed to ensure that all necessary pollution control measures are in place to fully restore the Bay and its tidal rivers by 2025. Over the past several decades, coordinated efforts by local government agencies, state and federal programs, agricultural producers, landowners, conservation groups, consultants and many others have resulted in significant improvements to Virginia's water quality. The Commonwealth's successes are the result of the collective effort of the public and private sectors.

Phase I and Phase II WIPs were developed and submitted to the EPA in 2010 and 2012. The Commonwealth's Phase III WIP was completed in August 2019. It details best management practices, along with programmatic actions, necessary to achieve state basin planning targets for nitrogen and phosphorus.

As noted in WIP III, "based on the BMP implementation levels and experiences over the last several years, it is clear that Virginia's nutrient reduction goals for 2025 are ambitious and will require significant effort, sustained funding and increased technical capacity in all sectors." To date, the agriculture sector has made significant progress towards meeting its WIP III commitments, but much work remains to be done.

Priority practices

There are best management practices that have been historically identified as the most cost-effective, based on their ability to provide significant reductions in nutrient and sediment loads at the lowest cost. For the Commonwealth, these practices include nutrient management, precision agriculture, cover crops, tillage systems, livestock stream exclusion, and riparian buffers. The table below shows each of these top practices ranked by the percentage of Phase III WIP agricultural sector nitrogen reductions they achieve.

Practice	Reduction percentage of total (%)	Description
Cover crops	20.0	These practices establish vegetative cover on agricultural lands to reduce soil erosion from wind and water. Cover crops also reduce the amount of nutrients and sediment that reach surface and ground water.
Nutrient management plans	15.4	Nutrient management plans improve and protect water quality by managing timing, rate and placement of fertilizer, manure and biosolids.
Animal waste systems	13.2	Animal waste systems are designed to manage liquid or solid waste in areas where livestock or poultry are concentrated. These systems help curb surface runoff and erosion and enable producers to recycle waste as fertilizer.
Livestock stream exclusion	11.8	These structural and management practices provide fencing along streams and other water sources, creating buffers that reduce erosion of stream banks from grazing livestock.
Tillage management	7.8	These practices reduce erosion by minimizing the tillage of soils on agricultural lands.
All other agricultural practices	31.8	Other agricultural practices including soil water quality plans, buffers, other land retirement practices, manure transporting, and prescribed grazing.

Emphasis on nutrient management and livestock stream exclusion practices

The Commonwealth's WIP focuses on livestock stream exclusion practices and nutrient management practices as critical keystones for achieving our commitments. During the 2020 General Assembly Session, Chapters 1185 and 1186 established statutory implementation requirements for these practices in the Commonwealth's Chesapeake Bay watershed if the WIP's commitments are not satisfied by a deadline between 2027 and 2030.

The Commonwealth's WIP specifically "seeks 85% implementation of NMPs on all cropland acres in the Chesapeake Bay watershed…these plans will include advanced actions, such as precision application, which further enhance the timing, rate and placement of nutrients." In support of this

commitment, § 62.1-44.121 of the Code of Virginia states "[a]ny operator of 50 or more acres of Chesapeake Bay cropland shall maintain and implement an approved nutrient management plan." Section 62.1-44.123 of the Code of Virginia requires landowners "on which 20 or more bovines are pastured…[to] install and maintain stream exclusion practices sufficient to exclude all such bovines from any perennial streams in the watershed."

The provisions established in §§ 62.1-44.121 and 62.1-44.123 become effective only if: "the Secretary of Agriculture and Forestry and the Secretary of Natural and Historic Resources jointly determine that the Commonwealth's commitments in the Chesapeake Bay Total Maximum Daily Load Phase III Watershed Implementation Plan have not been satisfied by a combination of (i) agricultural best management conservation practices, including the coverage of a sufficient portion of Chesapeake Bay cropland by nutrient management plans or the installation of a sufficient number of livestock stream exclusion practices, and (ii) other point or nonpoint source pollution reduction commitments."

The fifth enactment clause of Chapters 1185 and 1186 required the Virginia Soil and Water Conservation Board (Board) to develop a methodology for identifying perennial streams no later than December 31, 2020. The adopted methodology could not require field verification. The resulting perennial stream viewer is now available on the Department of Conservation and Recreation's (Department) website at https://www.dcr.virginia.gov/soil-and-water/perennial-streams.

Agricultural producer participation levels

One of the most critical components of ensuring the Commonwealth's success in achieving its water quality goals is ensuring agricultural producers participate in the numerous voluntary opportunities available to them.

The Department currently tracks the number of agricultural producers participating in the VACS Program. In FY2022, 1,981 participants were involved in the VACS Program; in FY2023, the number increased to 2,240 participants. In FY2024, there were 2,399 participants; in FY2025, the number of participants in the VACS Program increased to 2,438.

In FY2023, outreach efforts were increased by the Department, Districts, and partners, and those efforts have continued through the last several years. Efforts are focused on marketing to new producers, including producers considered socially disadvantaged or who operate small farms. The Department began tracking new participants in FY2023. There were 511 new participants during FY2023 and 509 new participants in FY2024. During FY2025, there were 541 new participants in the VACS Program.

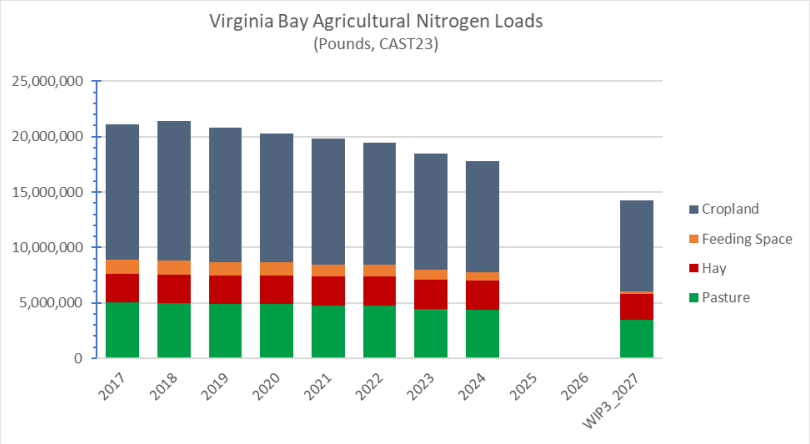
Nutrient and sediment load reductions for the Commonwealth's portion of the Chesapeake Bay watershed

The graphs below illustrate the progress made by the Commonwealth over the past several years in achieving its reductions. The reductions reflect the substantial financial investments made by the Commonwealth, state and local partners, and producers.

The implementation and installation of structural practices largely drive load reductions. However, the high level of demand for the necessary materials and qualified contractors has led to routine delays of implementation and installation of two or more years after a producer applies for funding through the VACS Program. Therefore, there is a delay between when the agricultural producer makes a commitment to implement and install a practice and when the Commonwealth is shown to have achieved a load reduction from that practice. The progress shown in 2024 in reducing the Commonwealth's nutrient loads is reflective of the funding and commitments made by producers in 2022.

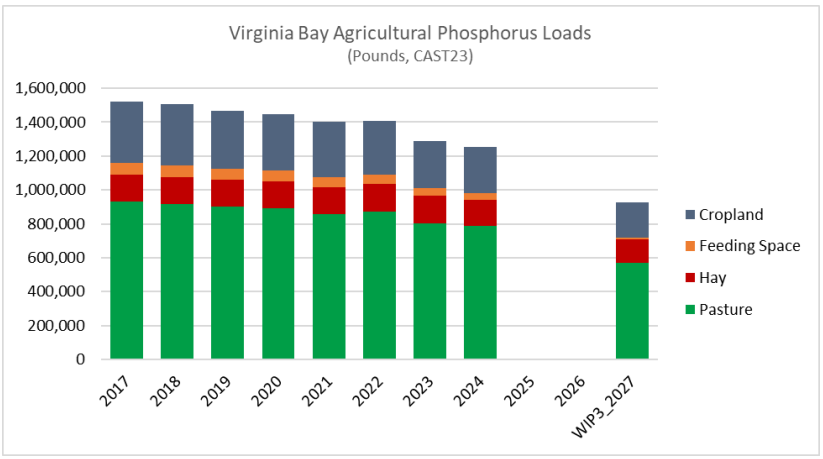
Nitrogen reductions

Since 2017, nitrogen loads from agricultural sources have been reduced by more than 3.3 million pounds. More than 62% of those reductions have been achieved in the last three years. This is indicative of an accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



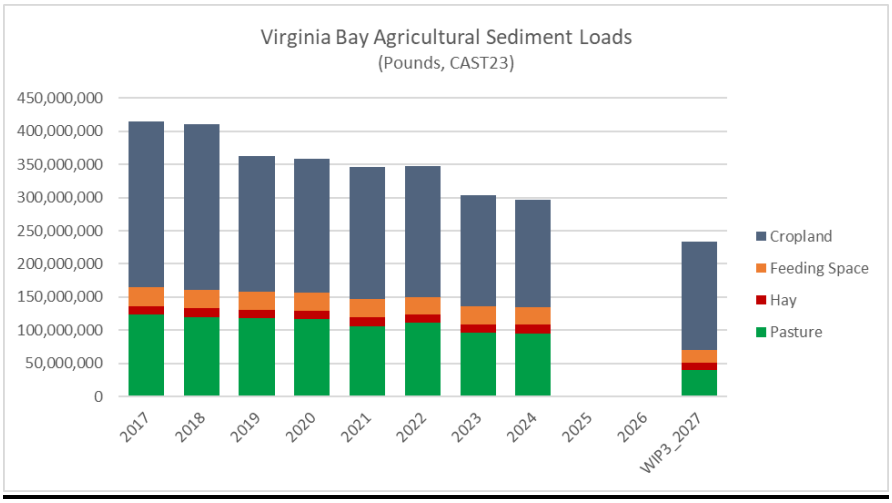
Phosphorus reductions

Since 2017, phosphorus loads from agricultural sources have been reduced by over 180,000 pounds. Nearly 58% of those reductions have been achieved in the last three years. This is indicative of a significantly accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



Sediment reductions

Since 2017, sediment loads from agricultural sources have been reduced by more than 112 million pounds. The Commonwealth has already fully met its sediment reduction targets for the Phase III WIP. The bar on the graph below, showing the WIP III levels, indicates the significant additional reductions that could be realized with full implementation of the WIP. These reductions are crucial to ongoing improvements to the health of our local streams and rivers.



Similar graphs for each major river basin in the Commonwealth's portion of the Chesapeake Bay watershed are available in the Appendices. Chapters 735 and 736 are primarily focused on achieving the Commonwealth's overall WIP commitments; however, it is equally important to consider the impact of implementing and installing practices for local water quality. Measuring and tracking the reductions achieved in each major river basin recognizes the impact of these efforts on local waters, and it also highlights which major river basins may require more targeted efforts to achieve the desired nutrient and sediment load reductions.

Practice implementation progress for the Commonwealth's portion of the Chesapeake Bay watershed

The graphs below illustrate the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP, presented as both numeric targets and percentage targets. The practices included in the 2024 progress are only those practices that remain in either the contract or the EPA Bay Model lifespan. The Commonwealth recognizes that there are likely a substantial number of structural practices, including livestock stream exclusion practices, that are no longer "counted" in the EPA Bay Model; the Department will seek to quantify the number of practices that are no longer counted in the Model. It is possible that some of these practices remain functional, and the Group continues to discuss ways to gather information related to these practices for inclusion in the data reported to the EPA Bay Model.

The tables below show the achievements in acres for all practices except for the animal waste management practices. The animal waste management practices are measured in animal units.

BaywideTop 10 Agricultural BMPs	2017	2018	2019	2020	2021	2022	2023	2024	WIP3 2027
Commodity + Cover Crop	160,068	145,974	151,936	242,458	240,140	303,565	352,081	400,692	443,557
Nutrient Management Core Nitrogen	595,633	567,621	499,434	556,024	580,522	640,850	710,440	693,512	951,395
Animal Waste Management System	255,380	219,356	331,418	416,521	499,588	580,040	939,938	1,222,534	2,228,900
Livestock Exclusion	12,251	12,868	13,371	15,683	17,559	19,108	33,442	37,999	72,156
Tillage Management	638,797	623,004	613,529	611,248	607,615	606,149	643,575	638,905	608,044
Soil and Water Conservation Plans					7,264	7,262	117,918	229,966	1,183,460
Forest Buffers	16,095	14,809	14,361	14,269	14,975	14,561	13,940	12,806	21,965
Land Retirement to Open Space	36,683	31,650	28,569	27,857	27,459	25,805	25,428	26,166	50,451
Grass Buffer	2,867	2,477	2,390	1,945	5,460	5,115	4,890	5,008	24,058
Pasture Management Composite	524,137	537,755	540,216	510,334	521,836	498,458	587,131	598,113	543,402

Baywide Top 10 Agricultural BMPs	2024	Percent of WIP Completed	WIP3 2027
Commodity + Cover Crop	400,692	90%	443,557
Nutrient Management Core Nitrogen	693,512	73%	951,395
Animal Waste Management System	1,222,534	55%	2,228,900
Livestock Exclusion	37,999	53%	72,156
Tillage Management	638,905	105%	608,044
Soil and Water Conservation Plans	229,966	19%	1,183,460
Forest Buffers	12,806	58%	21,965
Land Retirement to Open Space	26,166	52%	50,451
Grass Buffer	5,008	21%	24,058
Pasture Management Composite	598,113	110%	543,402

Similar tables for each major river basin in the Commonwealth's portion of the Chesapeake Bay watershed are available in the Appendices. As noted above, Chapters 735 and 736 are primarily focused on achieving the Commonwealth's overall WIP commitments; however, it is equally important to consider the impact of implementing and installing practices for local water quality. Measuring and tracking the reductions achieved in each major river basin recognizes the impact of these efforts on the local waters; it also highlights which major river basins may require more targeted efforts to achieve the desired nutrient and sediment load reductions.

While the Commonwealth's WIP includes programmatic and numeric metrics for practices, it is important to note that the Commonwealth can achieve its WIP commitments through any combination of implemented and installed practices. Chapters 735 and 736 have prioritized the development of nutrient management plans and the installation of livestock stream exclusion practices; however, the Commonwealth may achieve its needed reductions through increased implementation of other practices. Based on the 2024 progress, the Commonwealth is exceeding its targets in tillage management and pasture management; it is likely that the nutrient management and cover crop targets will be met as well. Similarly, there are practices that the Commonwealth is facing significant challenges in achieving, such as grass buffers. These grass buffers are not created through the installation of livestock stream exclusion practices; these are stand-alone buffer practices. Additional information is needed to determine the potential barriers preventing these grass buffer practices from being implemented or installed at the anticipated rates.

2. Funding for Agricultural Best Management Practices

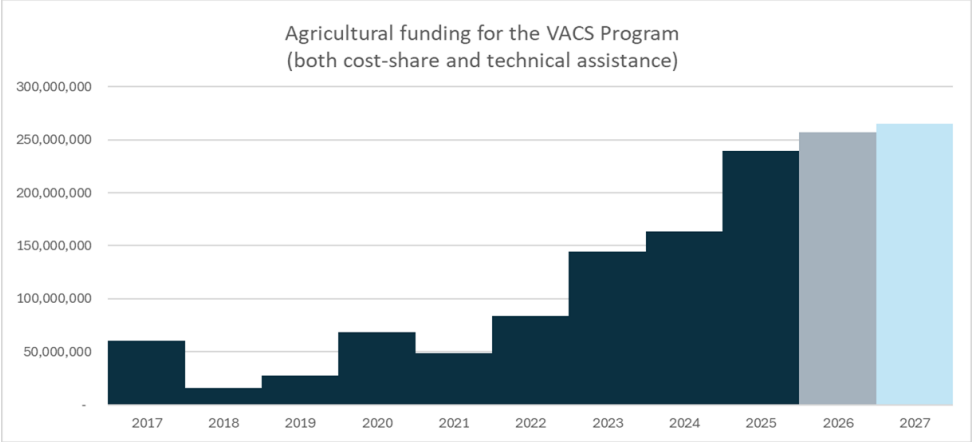
Section 10.1-2128.1 of the *Code of Virginia* requires:

> "[t]he Department of Conservation and Recreation, in consultation with stakeholders, including representatives of the agricultural community, the conservation community, and the Soil and Water Conservation Districts, shall determine an annual funding amount for effective Soil and Water Conservation District technical assistance and implementation of agricultural best management practices pursuant to §10.1-546.1."

The agricultural needs assessment is calculated based on several variables, including: the amount of nutrient reductions required from the agricultural sector for Virginia to meet its Chesapeake Bay water quality goals, the BMPs targeted for implementation to meet those goals, the cost of those BMPs, and the timeline (number of years) remaining to reach the water quality goals. When the amount of money appropriated for the Virginia Agricultural Cost-Share (VACS) Program at least equals the needs assessment, it is considered to be "fully funded." The agricultural needs assessment assumes funding is provided from both state and federal sources. In the FY2025-FY2026 biennium, increased inflation required revisions to the agricultural needs assessment. Additional state funding was required to meet the state's fiscal responsibilities in order to offset the rising costs associated with implementing and installing practices.

With the approval of Chapter 725 of the 2025 Session Acts of Assembly, the state portion of the agricultural needs assessment is anticipated to be fully funded through FY2026.

The graph below represents the allocations provided through the VACS Program to Districts for both practice implementation (cost-share) and technical assistance funding for FY2017- FY2025. FY2026 represents the anticipated allocations; FY2027 represents the funding levels needed as determined by the 2024 agricultural needs assessment. The FY2027 funding levels needed will be updated in the 2025 agricultural needs assessment this fall.



Additional information about the agricultural needs assessment is available in Appendix A.

Federal funding received

In addition to the significant investments made by the Commonwealth, substantial federal funding has been directed towards the implementation and installation of agricultural best management practices. The various federal *Programs*, funding sources, and grant opportunities offer different incentives, payment timelines, and practice options for producers.

Farm Bill Programs

The Natural Resources Conservation Service (NRCS) provides funding through several programs authorized through *Farm Bills*; these programs result in the implementation and installation of agricultural best management practices. NRCS has reported that the cumulative 2023 funding for these programs in Virginia totaled nearly $50 million. It is uncertain whether similar *Farm Bill* funding will be available during the remainder of this fiscal year and in future years.

Advancing Markets for Producers Grants (formerly named Climate Smart Commodities)

In one of the largest of these projects, Virginia Tech, collaborating with 14 other state and national partners (the Alliance to Advance Climate Smart Agriculture), was awarded $80 million for a pilot program. Each producer that participates in the pilot receives $100 per acre or animal unit for implementing climate-smart agricultural practices, all of which have water quality benefits as well. More than $18 million is being invested in practice implementation in the Commonwealth as part of this project.

The Department is coordinating the Commonwealth's efforts related to this pilot. The Colonial District and the Thomas Jefferson District are leading the efforts to reach producers within the Commonwealth, with both the Virginia Cooperative Extension and Virginia State University's Small Farm Outreach Program focusing on providing information to producers as well. Producers in the following counties are eligible to participate: Albemarle, Caroline, Charles City, Chesterfield, Essex, Fluvanna, Hanover, Henrico, Isle of Wight, James City, King and

Queen, King William, Louisa, Mathews, Middlesex, New Kent, Nelson, Prince George, Surry, and York. Producers in the cities of Charlottesville, Suffolk, and Williamsburg are also eligible to participate.

In the initial application period, over 500 producers in Virginia applied for funding; about 250 of those applicants were enrolled and contracted to implement best management practices. An additional application period is anticipated to be held later this summer. The Department will report the practices fully implemented through this project for reduction credit in the EPA Bay Model.

3. Potential Pathways to Enhance Progress

Many of the programs and initiatives that the Commonwealth currently offers producers to implement and install practices voluntarily must continue in order to reach our water quality goals. Sustained financial commitments, as well as further refinements and enhancements to these programs and initiatives, are critical to the Commonwealth's continued ability to reach its water quality goals.

Virginia Agricultural Best Management Practices Cost-Share (VACS) Program

The VACS Program (Program) is a water quality improvement program to reduce nutrients, sediment, and bacteria in waterways by implementing the most cost-effective best management practices. The Program is overseen by the Virginia Soil and Water Conservation Board (Board); administered by the Department; and locally implemented by the Commonwealth's 47 Soil and Water Conservation Districts (Districts). This year, there are over 60 practices for which an agricultural producer can receive cost-share funding for implementing or installing. The Board will allocate approximately $223 million for practice implementation and installation through the VACS Program this year. Over $33 million will be allocated for technical assistance services provided to producers by the Districts. For FY2026, a producer is eligible to receive up to $300,000 in cost-share funding.

Fully Funding the VACS Program

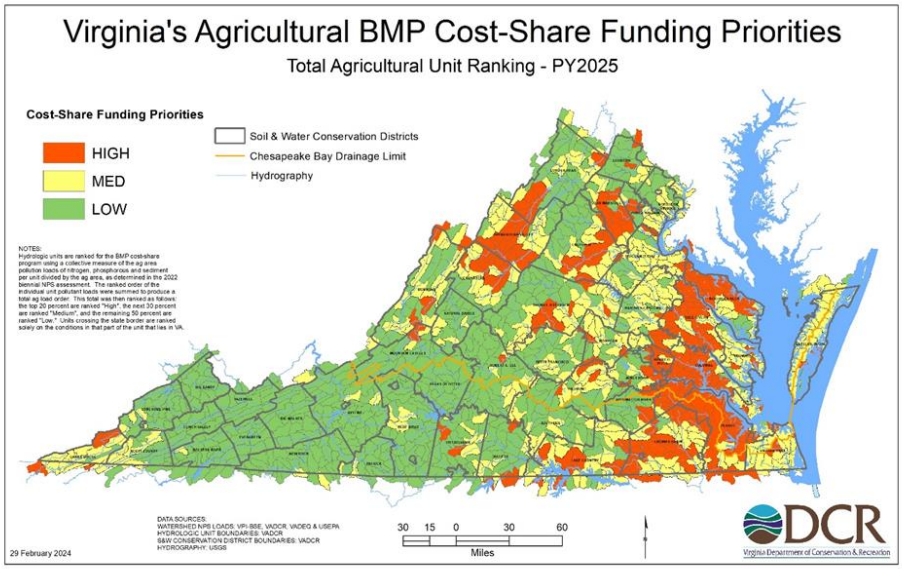
With the approval of Chapter 725 of the 2025 Session Acts of Assembly, the agricultural needs assessment is anticipated to be fully funded through FY2026. Continuing to fully fund the VACS Program at the agricultural needs assessment level is essential to ensure the Commonwealth meets its water quality goals and meets its commitments to agricultural producers.

Funding for High-Priority Hydrologic Units

The Department utilizes the agricultural component of Virginia's Nonpoint Source Assessment to focus its cost-share allocations on areas where funds can produce the greatest reductions in surface and groundwater contamination. The *2024 Nonpoint Source Assessment* represents the most recent available information and was used to determine the cost-share allocations for both FY2025 and FY2026. The *Nonpoint Source Assessment* will be revised in 2026 and will be used for determining the cost-share allocations for FY2027.

The allocations provided to each District for the VACS Program are primarily based on distributing a high percentage of the funding to waters with the highest pollutant loads based on nitrogen, phosphorus, and sediment. For FY2025 and FY2026, the highest-ranked hydrologic units (units) – those units that have the highest potential to contribute nutrients and sediment to the waters - are assigned 50 percent of the cost-share funds. The medium-ranked units are assigned 30 percent of the cost-share funds, while the lowest-ranked units are assigned 20 percent of the cost-share funds.

For FY2025 and FY2026, based on the *2024 Nonpoint Source Assessment*, the cost-share funding priorities for the VACS Program are shown in the map below.



AgBMP Technical Advisory Committee

The Board relies on the advice and experience of an AgBMP Technical Advisory Committee (TAC) for guidance on ways to improve the Program. The TAC is comprised of representatives from state and federal agencies, Soil and Water Conservation Districts, agriculture industry organizations, environmental organizations, and other partners. Over the last several years, hundreds of suggestions have been reviewed and discussed by the TAC. Many of these suggestions are incorporated into the Program after receiving approval from the Board. The work of the TAC has led to improved flexibility in the Program and increased options for producers. The Board and the Department will continue to examine ways to more effectively utilize the expertise of the TAC members, recognizing the time commitment members make to serve on the TAC. The Department is currently examining the possibility of using a facilitator to more strongly and fairly encourage consideration of the suggestions received related to the Program.

Whole Farm Approach

In 2019, the Board approved a Whole Farm Approach (WFA) pilot project in one District. The WFA allows a producer to submit a single cost-share application for a bundle of agricultural BMPs, including their choice of nutrient management, precision nutrient management, or cover crop practices. This significantly simplifies the process for the producer. The WFA has significantly increased producer participation and provides information on all practices implemented or installed on the agricultural operation, not just those funded by WFA. The WFA was slightly expanded in FY 2021 to include the Chesapeake Bay watershed portion of the Eastern Shore. In FY 2023, the WFA was again expanded to include seven Districts: Eastern Shore (Accomack and Northampton Counties), Halifax (Halifax County), Holston River (Washington County), New River (Carroll and Grayson County, City of Galax), Shenandoah Valley (Rockingham County), Tidewater (Gloucester, Mathews, and Middlesex Counties), and Three Rivers (Essex, King and Queen, and King William Counties). This very successful pilot was further expanded in FY 2024 to include an additional 5 Districts. As the WFA has expanded to different geographic regions of the Commonwealth, refinements have been made to facilitate easier participation by animal operations as well.

Several additional Districts participated in the WFA in FY2025. Those Districts included Appomattox River (Dinwiddie County and the City of Petersburg); Chowan Basin (Greensville, Southampton and Sussex Counties); Colonial (Charles City, James City, New Kent, and York Counties and the City of Williamsburg), Evergreen (Smyth County); Piedmont (Amelia, Nottoway, and Prince Edward Counties) and Southside (Charlotte and Lunenburg Counties). It is anticipated that additional Districts will participate in FY2026. A steady expansion of the WFA has increased the number of VACS Program participants and encouraged producers to utilize precision agriculture techniques on their operations.

Direct Pay for Nutrient Management Planners

In 2019, the Department established a direct pay initiative for nutrient management planners as an alternative to funding nutrient management plans through the VACS Program. This initiative compensates nutrient management planners for developing, revising, and implementing nutrient management plans, particularly in counties within the Chesapeake Bay watershed where the greatest need for plans exists for cropland. This emphasis on ensuring that nutrient management plans are implemented on cropland will assist the Commonwealth in achieving its water quality goals. Payments are made to the planners on a first-come, first-served basis until available funding has been fully obligated. This is a far simpler process for planners to receive payment than responding to a Request for Applications (RFA).

The Department continues to review methods to further incentivize private planners. One method may be to further encourage private planners to utilize the Nutrient Management Module in the Conservation Application Suite. Using the Module would be beneficial for both the planners and the Department. The Department would have access to needed nutrient management data (i.e., acres, location); planners would not have to track their information on a spreadsheet that is submitted to the Department. The Department is currently exploring ways to assist planners with digitizing their field maps, including utilizing a part-time position to provide direct assistance to planners. The Department continues to examine ways to increase the responsiveness of the

Module. One anticipated modification will enable a planner to upload a spreadsheet containing the necessary calculations conducted offline, allowing the Module to operate more efficiently.

Dairy Producer Margin Coverage Premium Assistance Program

The Virginia Department of Agriculture and Consumer Services implements the Dairy Producer Margin Coverage Premium Assistance Program (Program) to provide reimbursement to dairy producers for Tier I federal Dairy Margin Coverage premium payments, while also providing a conservation benefit by requiring producers to develop, or initiate the process of developing, a nutrient management plan (NMP) or Natural Resources Conservation Service soil health plan. In the Program's fourth year, 23% of the dairies that applied submitted applications in which NMPs had an effective date within one month of the Program's opening enrollment date. This would indicate some correlation between the Program requirements and motivation to develop or update a resource management plan or NMP. Four first-time applicants indicated that the development of a nutrient management plan or soil health plan for their operation was influenced by the requirement to receive reimbursement through this Program.

Poultry litter transport program

In recent General Assembly Sessions, funding was provided for nonpoint source reduction projects, including the poultry litter transport incentive program. Utilizing the funding provided, the Department expanded the transport program to include Accomack County while maintaining programs in Page and Rockingham counties. As a strategy in WIP III, poultry litter transported from these three key counties needs to increase from 5,000 – 6,000 tons annually to approximately 89,000 tons annually by 2025, and each year thereafter. For FY 2024, 5,568.51 tons of litter were transported out of Accomack County, totaling $167,055.30 in payments. Out of Page County, 500 tons of litter were transported, totaling $8,750.00 in payments. Out of Rockingham County, 19,954.65 tons of litter were transported, totaling $392,916.18 in payments. FY 2024 contracts requested a total of 48,510.97 tons of litter be moved; however, most of these requests were unable to be filled due to the limited availability of litter for the applicants.

In FY2025, the number of counties that are eligible to receive poultry litter was expanded. The Department continues to investigate the program to determine if there are additional ways to encourage its use. Additionally, the Board allocated $3 million to this important program for use during FY2025 and FY2026.

Continue providing support to the Department and Districts

The 2024 Special Session 1 provided additional resources to both the Department and the Districts. The Department received three additional positions: one nutrient management planner position; one position to assist with the training needs of Districts so Districts are able to provide engineering, agronomic, and technical assistance for the preparation of conservation practices in the Virginia Agricultural Cost share program; and one position to expedite the provision of assistance to Soil and Water Conservation Districts with engineering designs for structural practices.

Districts were provided an additional $3 million for administrative and operations funding. This additional funding recognized the extra administrative and financial responsibilities that Districts assume with the increased cost-share funding from the VACS Program.

An additional $97,000 was provided to the Department for services supporting Districts, including auditing and training. These enhanced funds recognize the increased expense associated with financial audits and will also allow the Department to offer additional training opportunities to Districts.

Chapter 725 of the 2025 Session Acts of Assembly provided for three additional positions in the Department, which are funded from the interest accrued in the Water Quality Improvement Fund. The positions will include a Conservation District Coordinator, a data services position, and a program support position. The Conservation District Coordinator will be responsible for assisting certain Districts with administrative and financial responsibilities. The program support position will provide additional assistance with the Department's administration of the VACS Program and other District-related financial assistance.

Support sustained federal funding

The Commonwealth recognizes the critical role federal funding plays in achieving the WIP. Ensuring NRCS and other federal partners receive the level of funding determined necessary in the agricultural needs assessment is vital to the Commonwealth's continued success in reducing the nutrient and sediment load reduction targets. Working with stakeholders and partners to increase the awareness of the needs of federal partners should be a focused, ongoing effort.

Collaborate with NRCS to increase exclusion practices reported

Efforts are ongoing to improve the tracking, reporting and verification of NRCS-implemented agricultural best management practices, one of which is specifically targeted towards livestock exclusion practices funded by NRCS. Currently, NRCS only tracks "fencing", and there is no distinction between the extent of fence excluding livestock from streams and boundary or cross fencing. The Commonwealth continues to request that NRCS modify its databases to capture this distinction, which would allow the fence excluding livestock from the stream to be reported for credit in the EPA Bay Model. Alternatively, the United States Geological Survey, which is under contract by NRCS to aggregate and report their implementation data, could conduct a mapping exercise that attempts to estimate the portion of NRCS-reported "fence" that is associated with livestock exclusion from streams.

Continue reviews of existing data to target efforts

The Department is refining a review of pastures with perennial streams. Utilizing the perennial stream viewer, developed pursuant to Chapters 1185 and 1186 (2020), the Department conducted a cursory review of all pastureland in the Commonwealth's Chesapeake Bay watershed that contains a perennial stream. Additionally, the Department has included all available practice data as an overlay of this review. Functionally, the Department is able to delineate areas that appear to

be pasture, with a perennial stream, that have no practices implemented or installed on the land. This review is being further refined and could help determine where to target efforts to reach additional producers.

Contract with data scientist to identify opportunities for VACS Program improvements

The Department maintains an incredible amount of data related to the VACS Program. However, the Department lacks the resources to study and review the data for potential programmatic improvements. One possible solution to address this concern is to contract with a data scientist. A data scientist would be able to examine the data for potential efficiencies in data entry and data reporting. This individual could also review data points related to practice implementation and installation that may lead to revisions to the VACS Program, which could encourage more producer participation.

Pay-for-Outcomes Nonpoint Source Pollution Reduction Pilot Program

Item 365 L of Chapter 2 of the 2024 Special Session 1 Acts of Assembly allocated $20 million to the Department of Environmental Quality (DEQ) for a pay-for-outcomes pilot program in the Chesapeake Bay watershed. Item 365 L provides

> "[the] Department shall issue requests for nonpoint source pollution reduction proposals, conduct a transparent proposal selection process based on project ranking criteria, execute contracts with selected entities, verify that the promised nonpoint source pollutant reductions are being achieved, and make payments when contractually defined terms are verified. The project ranking criteria shall include cost per pound of nutrients removed, the level of assurance that nutrient reductions shall be provided, habitat and resilience benefits, readiness to proceed, local government coordination, the provision of long-term maintenance and applicability to locally impaired waters."

DEQ developed and published a Request For Applications (RFA) that incorporated the Item 365 L language. Following the RFA's release, DEQ held two informational pre-application sessions where potential applicants were invited to attend and ask questions about the program. DEQ received over 30 unique applications and awarded eight successful applicants (nine projects in total). The selected applicants are expected to share up to $19,000,000 of the $20,000,000 allocated in Item 365 ($1,000,000 reserved for DEQ administrative costs). Together, these nine projects are poised to remove approximately 588,000 pounds of nitrogen from the Bay watershed over their operating lifespan.

DEQ allocated over $5,000,000 to projects offering innovative agricultural nutrient control methods. These agricultural projects aim to collectively reduce or remove 335,000 pounds of nitrogen from the Bay watershed.

The forthcoming agreements with successful applicants will explicitly indicate that payments are tied to demonstrated outcomes at a set rate per pound of nitrogen removed. Consequently, the total award could be lower should any awardee underperform. However, underperformance by one awardee may free up funds to potentially compensate other awardees for their

overperformance. Additional information on the projects is available at https://www.deq.virginia.gov/topics-of-interest/nps-pilot-program.

4. Other Initiatives Focused on the Chesapeake Bay

There are numerous other initiatives outside the scope of this Group that focus on improving the water quality of the Chesapeake Bay. Some of these initiatives focus on increasing the data supplied to the EPA Bay Model, while others concentrate on updating the EPA Bay Model itself or the agreements between the Chesapeake Bay states.

Virginia Farmer Survey of Voluntary Best Management Practices

Members of Virginia's Voluntary Agricultural Best Management Practices (BMP) Task Force crafted the Chesapeake Bay Voluntary Ag BMP Producer Survey over many months, with a goal of learning more about conservation practices on farms in the Chesapeake Bay watershed. Task force members worked closely together and included representatives from the: Virginia Agribusiness Council, Virginia Farm Bureau, Virginia Cattlemen's Association, Natural Resources Conservation Service, Virginia Association of Soil and Water Conservation Districts, Virginia Department of Conservation and Recreation, Virginia Cooperative Extension, Virginia Department of Agriculture and Consumer Services, Virginia Department of Forestry, Colonial Soil and Water Conservation District, Environmental Protection Agency, Virginia Department of Environmental Quality, Office of the Secretary of Natural and Historic Resources, and Virginia Commonwealth University's Survey and Evaluation Research Lab, among other partners.

The survey is designed to gather more information about voluntary conservation practices on Virginia farms in the Chesapeake Bay watershed. For purposes of this survey, "voluntary" implies practices carried out at the producer's own expense (i.e., without cost-share) and includes practices that may have been cost-shared at one time and continue to be maintained past the cost-share contract period (out of practice lifespan). The information gathered from the survey is intended to help the Commonwealth of Virginia understand how farmers are conserving soil, improving water quality, and helping Virginia agriculture achieve its water quality goals for the Watershed Implementation Plan III for the Chesapeake Bay.

The survey is expected to be open from May 27, 2025, through June 30, 2026. Surveys can be completed online or in hard copy form, and with assistance from Virginia Cooperative Extension agents or staff in participating Soil and Water Conservation Districts. For more information and frequently asked questions, please visit the project website at https://vaswcd.org/virginia-farm-voluntary-agricultural-bmp-inventory/.

5. Future Work of the Group

Over the next year, the Group will continue to discuss ways to encourage and expedite the development of nutrient management plans for producers and to increase the implementation rates of livestock stream exclusion practices. The recommendations developed during these

discussions will provide additional direction and guidance to ensure the Commonwealth meets its WIP commitment.

The Group will also focus on a closer examination of the existing programs and incentives currently being implemented. Offering increased financial incentives for all livestock stream exclusion practices, such as providing 100 percent of the cost to install those practices, could be considered. Providing additional funding for continued conservation initiative practices (CCIs) may also be an option to assist producers with maintaining exclusion practices. Other topics to be discussed include supply chain investment and how to incentivize and develop new partnerships to assist producers, as well as encouraging new innovative strategies.

The Group will also continue to discuss mechanisms that capture voluntarily implemented or installed practices that do not utilize state or federal financial assistance. Reporting the data associated with practices that are outside of the modeled or contract lifespan, as well as voluntarily implemented or installed practices, is critical to the Commonwealth's ability to meet its commitments. Ways to further prioritize the verification of existing practices, before they fall out of the modeled or contract lifespan, should also be examined.

The substantial amounts of grant funding available in the Commonwealth have provided additional incentive models for the Group to review. In addition to ensuring adequate funding is available for the traditional voluntary programs (i.e., VACS Program), different incentive types, variable financial incentive amounts, and different practices prioritized in different programs could all be ways to encourage producers to participate in voluntary programs or to provide information on practices implemented and installed on their operations.

The Chesapeake Bay Program Partnership is currently undergoing a process to amend the 2014 Chesapeake Bay Watershed Agreement, with revisions scheduled to be complete by the end of 2025. While these discussions are not specifically tied to this Group's charge, decisions regarding the goals, outcomes, and targets of the Agreement may impact future work and direction of the Group.

Appendix A: Chapter 5 (Annual Funding Needs for Effective Implementation of Agricultural Best Management Practices) from the FY2024 Chesapeake Bay and Virginia Waters Clean-Up Plan

In accordance with subsection C of § 10.1-2128.1 of the Water Quality Improvement Act, the Department of Conservation and Recreation (DCR), in consultation with a stakeholder advisory group (SAG), including representatives of the agricultural community, the conservation community, and the Soil and Water Conservation Districts (SWCDs or Districts), determines the funding needs for effective SWCD technical assistance and implementation of agricultural best management practices (BMPs). Pursuant to § 2.2-1504 of the Code of Virginia, DCR must provide to the Governor the annual funding amount needed for each year of the ensuing biennial period. For Fiscal Years (FY) 2024-2030, a revised estimate of over $2.9 billion may be required from state and federal funds, as well as farmer financial contributions, to meet water quality goals (Figure 5.1 and Table 5.1). Approximately 45% of this total (slightly over $1.3 billion) could be needed from State sources for direct funding of the Virginia Agricultural Cost-Share (VACS) Program, associated technical assistance and operational support for SWCDs that implement the VACS program.

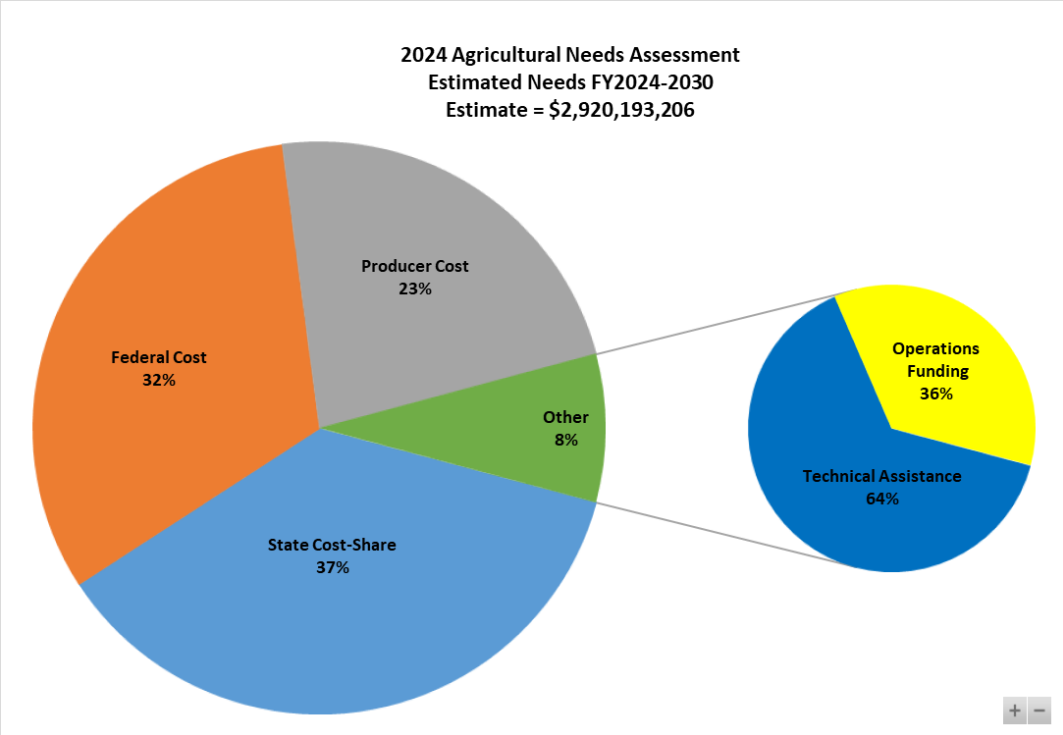


Figure 5.1: 2024 Agricultural Needs Assessment Summary

Virginia's Phase 3 Chesapeake Bay Total Maximum Daily Load (TMDL) Watershed Implementation Plan (WIP III) was finalized on August 23, 2019. The methodology for the Agricultural Needs Assessment was revised in 2020 to accurately reflect the commitments made by Virginia in WIP III. Although Virginia made excellent progress towards the 2025 nutrient reduction goals as of the FY 2023 progress report, significant investments in agricultural BMP implementation continue to be needed. Most notably, ongoing funding for annual BMPs, such as

nutrient management and cover crops, is needed to maintain and expand the progress Virginia has made through FY 2023. Practices such as animal waste storage livestock stream exclusion, and both grass and forested riparian buffers continue to demonstrate significant gaps in achieving implementation goals. Both animal waste management and livestock stream exclusion practices are suspected of having high numbers of implemented practices that are not included in our BMP tracking systems. As the completeness of our data improves through various efforts, including a survey of farmers conducted by the Virginia Cooperative Extension and improvements to NRCS data reporting, the needs assessment will be adjusted.

The Agricultural Needs Assessment for FY 2024 – 2030 uses recent BMP cost data from Virginia and where BMP cost data was lacking in Virginia, from the Chesapeake Bay Program (CBP). DCR used the implementation progress made by Virginia through FY 2023, which has been accepted by EPA, to calculate the additional practices needed to fulfill the WIP III agricultural BMPs goals and achieve the expected reductions for the agricultural sector.

For the Southern Rivers areas, the needs assessment is based on the Chesapeake Bay annual cost estimates and a split of 70% to the Chesapeake Bay watershed and 30% to lands outside of the Chesapeake Bay watershed (the Southern Rivers watershed). Implementation in the Southern Rivers is not affected by the 2025 deadline associated with the Chesapeake Bay TMDL or by Virginia's 2027 goal WIP completion date enacted in Chapters 735 and 736 of the 2023 Session Acts of Assembly. TMDL implementation plans for local rivers and streams in the Southern Rivers area require significant implementation of agricultural BMPs to help address those local water quality impairments. The 70/30 split used to estimate Southern Rivers agricultural needs has been determined to be sufficient through 2027. Upon full implementation of the WIP in the Chesapeake Bay, a reassessment of this split or modified approach to estimate Southern Rivers implementation costs will be needed.

The total annual implementation costs are then divided between the various funding sources: federal (35% [assumed]), state (40%) and agricultural producer (25%). In developing the 2023 Agricultural Needs Assessment, the Agricultural Needs Assessment Workgroup held significant discussions and raised concerns about the divisions between the funding sources. The Workgroup discussed reducing the percentage of funding that is assumed from federal sources or including the "federal gap" between the estimated need and the actual funding received in the state's portion of the Assessment. No consensus about how to address this gap was reached by the Workgroup. While the 2024 Assessment continues to assume 35% of the necessary funding will be provided from federal sources, recent federal funding appropriations indicate that this estimate may be too high. In 2024, there is a nearly $97 million shortfall between the estimated financial support needed from federal sources and the projected federal funding to Virginia NRCS; for this Assessment, the federal shortfall is left as a federal responsibility. Table 5.1 below has been modified to show the calculated federal funding needs for each biennium as well as the estimated federal gap for 2024. Regardless of federal funding levels, Virginia is responsible for achieving the Chesapeake Bay WIP III goals. With that in mind, future federal funding shortfalls may need to be accounted for at the state level.

Costs through June 2023 were not adjusted and reflect actual program allocations; however, estimated costs for all remaining agricultural practices needed through FY 2032 were revised as follows:

- The agricultural BMP implementation "delta" between CBP approved FY 2023 progress and the WIP III Agricultural BMPs was determined.
- Remaining implementation for each BMP was divided equally among the four years left to the 2027 WIP completion timeline for all practices. The 2027 goal WIP completion date was based on the changes enacted in Chapters 735 and 736 of the 2023 Session Acts of Assembly.
- Practice costs were calculated for all remaining implementations using 2021-2023 VACS average costs or the Virginia Soil and Water Conservation Board-approved increased practice rates where applicable, with an additional 3.07% inflation adjustment based on 2024 projected inflation.
- The actual FY 2024-2025 VACS Program funding received and actual federal 2023 and projected 2024 funding were documented.
- A 3% annual repair and replacement rate for all structural practices was assumed.
- The technical assistance funding was calculated at a rate of 15%.

DCR has two Professional Engineers (PE), three Engineering Specialists and a Lead Trainer/Engineering Specialist to assist SWCDs and farmers. The total cost related to providing these services is part of the DCR budget and, therefore, has been excluded from the revised agricultural needs assessment.

During the 2020 General Assembly, a base technical assistance amount of $4.55 million was provided to SWCDs as part of the SWCDs' recurring base budget. This budget action recognized that consistent funding is necessary for SWCDs to adequately provide technical assistance to their agricultural producers. During the 2024 General Assembly Special Session 1, an additional $3.6 million in administration and operational funding was provided to SWCDs, bringing the annual total to $12.8 million. These stable funds will enable SWCDs to hire additional staff, including administrative personnel, provide appropriate training for employees, and address increased expenses related to the day-to-day operations.

Significant deposits to the Virginia Natural Resources Commitment Fund (VNRCF) in recent years, along with generous funding for district operations, together totaling more than $750 million, have demonstrated significant commitments toward meeting the FY2024-2030 agricultural BMP implementation goals and district support needs. The 2024 Needs Assessment indicates that with the current deposits to the VNRCF, along with an estimated $6 million from recordation fees in FY25, the $4.55 million in base technical assistance and $12.8 million district operations funding for FY26, no additional funding is required to fully satisfy the needs in FY2026. There will be an estimated balance of $5.7 million from these deposits carried forward to FY27. Based on the 2024 Needs Assessment, the remaining estimated funding needed for FY2027 is $249,111,439. The 2027-2028 biennial need is estimated at $319,336,134. Please note that the 2027-2028 needs will change based on updates to the 2025 Needs Assessment.

Table 5.1: 2024 Agricultural Needs Assessment – Biennial Needs Summary with All Data

2024 Agricultural Needs Assessment - Biennial Needs Summary with All Data

Estimated Costs		2021-2022 Biennium		2023-2024 Biennium		2025-2026 Biennium		2027-2028 Biennium		2029-2030 Biennium		2031-2032 Biennium	
								2027 Target Year					
2019-2025	FY19 Funding*	FY20 Funding*	FY 21 Funding*	FY 22 Funding*	FY 23 Funding*	2024	2025	2026	2027	2028	2029	2030	2031	2032
CHESAPEAKE BAY STATE COST SHARE	$14,384,534	$39,486,279	$26,466,959	$48,850,000	$86,052,479	$141,926,526	$147,578,519	$153,337,453	$159,206,537	$49,167,206	$49,167,206	$49,167,206	$49,167,206	$49,167,206
CHESAPEAKE BAY TECHNICAL ASSISTANCE	$2,141,348	$6,367,656	$3,883,068	$6,351,800	$11,185,143	$18,450,448	$22,136,778	$23,000,618	$23,860,981	$7,375,081	$7,375,081	$7,375,081	$7,375,081	$7,375,081
CHESAPEAKE BAY PRODUCER PORTION						$88,704,079	$92,236,574	$95,835,908	$99,504,086	$30,729,504	$30,729,504	$30,729,504	$30,729,504	$30,729,504
CHESAPEAKE BAY FEDERAL PORTION	$15,960,273	$15,401,409	$20,641,081	$22,174,025	$30,713,325	$124,185,710	$129,131,204	$134,170,271	$139,306,720	$43,021,305	$43,021,305	$43,021,305	$43,021,305	$43,021,305
OCB STATE COST SHARE	**$9,613,603**	**$17,608,120**	**$12,697,099**	**$20,940,000**	**$36,881,589**	**$60,825,654**	**$63,247,937**	**$65,716,051**	**$68,231,373**	**$21,071,660**	**$21,071,660**	**$21,071,660**	**$21,071,660**	**$21,071,660**
OCB TECHNICAL ASSISTANCE	**$1,431,125**	**$2,890,794**	**$1,966,931**	**$2,722,200**	**$4,793,887**	**$7,907,335**	**$9,487,190**	**$9,857,408**	**$10,234,706**	**$3,160,749**	**$3,160,749**	**$3,160,749**	**$3,160,749**	**$3,160,749**
OCB PRODUCER PORTION						$38,016,034	$39,529,960	$41,072,532	$42,644,608	$13,169,787	$13,169,787	$13,169,787	$13,169,787	$13,169,787
OCB FEDERAL PORTION	$18,964,850	$19,008,462	$15,739,229	$23,572,978	$24,481,880	$53,222,447	$55,341,944	$57,501,545	$59,702,452	$18,437,702	$18,437,702	$18,437,702	$18,437,702	$18,437,702
SWCD OPERATIONS FUNDING	**$6,209,091**	**$6,209,091**	**$6,209,091**	**$6,209,091**	**$9,809,091**	**$9,809,091**	**$12,809,091**	**$12,809,091**	**$12,809,091**	**$12,809,091**	**$12,809,091**	**$12,809,091**	**$12,809,091**	**$12,809,091**
	* Actual state and federal funding in FFY19-23 has been updated. Federal projected for 2024 is shown on the NRCS Funding tab and the 2024 Federal Gap in 2024 shown below is added to the 2025-2026 Federal Need.													
TOTALS	$68,704,824	$106,971,811	$87,603,458	$130,830,094	$203,917,394	$543,047,324	$571,499,197	$593,300,877	$615,519,554	$198,942,084	$198,942,084		$198,942,084	$198,942,084
CS +TA STATE NEEDS	**$27,570,610**	**$56,352,849**	**$45,014,057**	**$78,874,000**	**$138,913,098**	**$229,109,963**	**$242,450,423**	**$251,911,530**	**$261,553,597**	**$80,774,695**	**$80,774,695**	**$80,774,695**	**$80,774,695**	**$80,774,695**

Revised state cost share and technical assistance (15% of CS starting in 2025) needs and federal funding need will be adjusted annually based on actual budgets and gaps.

Deposits	
FY24 amendments	$286,714,688
FY25 deposits	$201,076,028
Total	$487,790,716
Available Funds	
Remaining after PY25 allocations	$254,794,928
FY24 Recordation Unallocated	$1,186,583
FY25 Recordation Estimate	$6,000,000
Anticipated FY25 Base TA	$4,550,000
Total Unallocated Balance	$266,511,511

	FY24 VACS Allocated	FY25 VACS Allocated
Bay CS	$87,220,000	$106,833,575
OCB CS	$37,380,000	$45,785,859
WFA Set Aside	$20,000,000	$53,571,429
Bay & OCB TA	$18,819,183	$31,354,825
Total CS+TA	$163,419,183	$237,545,788
Previous Years' Carry Forward (2019-2023)	$62,792,129	
Admin & OPS	$9,809,091	$12,809,091
CS +TA Gap	$2,898,651	$4,904,635
2024-2025 Funding Gap	State Gap	$7,803,287
	2024Federal Gap	$96,944,218
	2025 Federal Need	$184,473,148

2025-2026 State Funding Need	
State Gap	$3,901,643
2025-2026 CS + TA	$494,361,953
2025-2026 State Funding Need	$498,263,597
FY25 Allocations	$237,545,788
Unallocated Balance	$266,511,611
FY26 Remaining Need	-$5,793,802
2025-2026 Federal Need	$440,774,443

2027-2028 State Funding Need	
State Gap	$3,901,643
2027-2028 CS + TA	$342,328,292
Balance from FY26	-$5,793,802
2027-2028 State Funding Need	$340,436,134
2027-2028 Federal Need	$292,781,918

2029-2030 State Funding Need	
State Gap	$0
2029-2030 CS + TA	$161,549,390
2029-2030 State Funding Need	$161,549,390
2029-2030 Federal Need	$122,918,014

2031-2032 State Funding Need	
State Gap	$0
2029-2030 CS + TA	$161,549,390
2029-2030 State Funding Need	$161,549,390
2031-2032 Federal Need	$122,918,014

AG BMP FUNDING NEEDED TO MEET WIP III		FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	
CHESAPEAKE BAY CUMULATIVE BMP COST		**$297,060,530**	**$305,972,346**	**$315,151,516**	**$324,606,062**	**$49,507,732**	**$49,507,732**	**$49,507,732**	**$49,507,732**	**$49,507,732**	
CHESAPEAKE BAY ANNUAL BMP COST		**$57,755,785**	**$62,973,951**	**$68,192,116**	**$73,410,282**	**$73,410,282**	**$73,410,282**	**$73,410,282**	**$73,410,282**	**$73,410,282**	
CHESAPEAKE BAY STATE SHARE 40%	0.4	$141,926,526	$147,578,519	$153,337,453	$159,206,537	$49,167,206	$49,167,206	$49,167,206	$49,167,206	$49,167,206	Bay Total Costs based on 2023 Progress and WIP III calculated in 2024
CHESAPEAKE BAY PRODUCER PORTION 25%	0.25	$88,704,079	$92,236,574	$95,835,908	$99,504,086	$30,729,504	$30,729,504	$30,729,504	$30,729,504	$30,729,504	
CHESAPEAKE BAY FEDERAL PORTION 35%	0.35	$124,185,710	$129,131,204	$134,170,271	$139,306,720	$43,021,305	$43,021,305	$43,021,305	$43,021,305	$43,021,305	
TOTAL OCB BMP COST 30/70	**0.428571429**	**$152,064,135**	**$158,119,841**	**$164,290,128**	**$170,578,433**	**$52,579,149**	**$52,579,149**	**$52,579,149**	**$52,579,149**	**$52,579,149**	Total OCB cost based on 30%/70% WIP need calculated in 2024
OCB STATE SHARE 40%	0.4	$60,825,654	$63,247,937	$65,716,051	$68,231,373	$21,071,660	$21,071,660	$21,071,660	$21,071,660	$21,071,660	
OCB PRODUCER PORTION 25%	0.25	$38,016,034	$39,529,960	$41,072,532	$42,644,608	$13,169,787	$13,169,787	$13,169,787	$13,169,787	$13,169,787	
OCB FEDERAL PORTION 35%	0.35	$53,222,447	$55,341,944	$57,501,545	$59,702,452	$18,437,702	$18,437,702	$18,437,702	$18,437,702	$18,437,702	

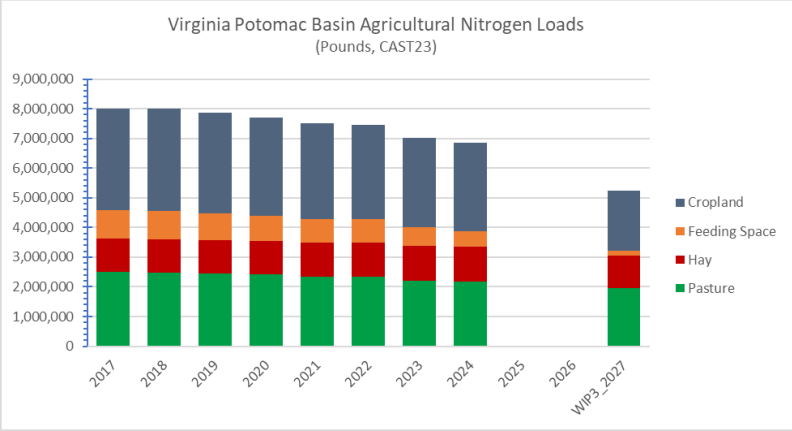
Annual BMPs include cover crops, nutrient management, poultry litter transport

Appendix B: Progress Report for the Shenandoah/Potomac River Basin

The graphs below illustrate the progress made by the Commonwealth over the past several years in achieving pollution reductions in the Shenandoah/Potomac River Basin. The reductions reflect the substantial financial investments made by the Commonwealth, state and local partners, and producers.

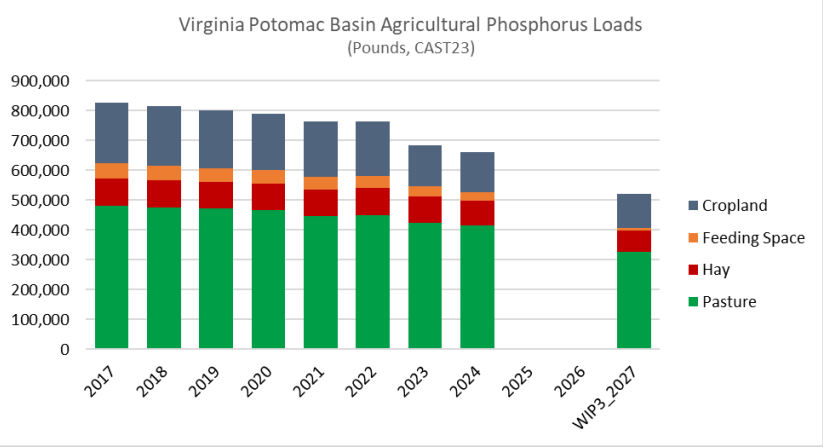
Nitrogen reductions

Since 2017, nitrogen loads delivered to the Chesapeake Bay from agricultural sources in the Shenandoah/Potomac River Basin have been reduced by more than 1,160,000 pounds. More than 51% of those reductions have been realized in the last two years. This is indicative of a significantly accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



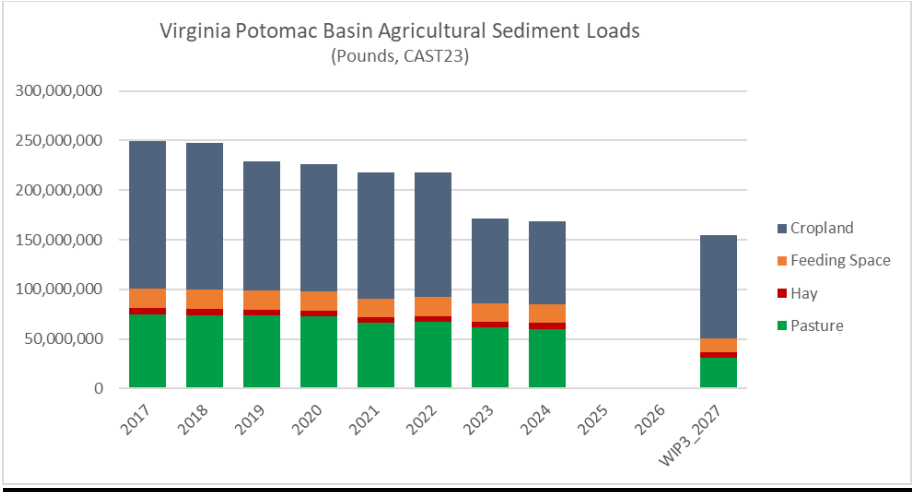
Phosphorus reductions

Since 2017, phosphorus loads delivered to the Chesapeake Bay from agricultural sources in the Shenandoah/Potomac River Basin have been reduced by more than 165,000 pounds.



Sediment reductions

Since 2017, sediment loads delivered to the Chesapeake Bay from agricultural sources in the Shenandoah/Potomac River Basin have been reduced by more than 80.8 million pounds. The Commonwealth has already fully met its sediment reduction targets for the Phase III WIP. The bar on the graph below, showing the WIP III levels, indicates the significant additional reductions that could be realized with full implementation of the WIP. These reductions are crucial to ongoing improvements to the health of our local streams and rivers.



Practice implementation progress

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the Shenandoah/Potomac River Basin from 2017 through 2024.

Potomac Top 10 Agricultural BMPs	2017	2018	2019	2020	2021	2022	2023	2024	WIP3 2027
Commodity + Cover Crop	31,809	25,481	24,777	37,838	33,737	41,204	46,877	62,462	124,346
Nutrient Management Core Nitrogen	170,426	159,434	157,597	124,073	143,480	171,023	183,729	145,705	319,301
Animal Waste Management System	154,992	153,233	272,067	353,320	417,871	474,831	779,242	930,851	1,575,193
Livestock Exclusion	3,928	4,208	4,434	5,018	5,822	6,539	12,930	14,226	8,923
Tillage Management	152,163	149,562	148,103	147,373	146,393	145,853	179,858	178,636	152,005
Soil and Water Conservation Plans					2,639	2,638	18,926	35,308	293,984
Forest Buffers	6,016	5,512	5,287	5,149	5,323	4,991	4,715	4,024	4,782
Land Retirement to Open Space	14,687	12,330	11,166	10,841	10,499	10,680	10,361	10,394	18,614
Grass Buffer	838	745	695	578	1,769	1,677	1,614	1,649	5,203
Pasture Management Composite	166,597	175,494	174,729	162,267	168,187	163,319	188,348	199,983	178,715

The table below presents the implementation forecast of ten key practice types included in the Commonwealth's Phase III WIP for the Shenandoah/Potomac River Basin spanning from 2025 through full implementation of the WIP in 2027.

Potomac Top 10 Agricultural BMPs	2024	2025 Forecast	2026 Forecast	WIP3 2027
Commodity + Cover Crop	62,462	83,090	103,718	124,346
Nutrient Management Core Nitrogen	145,705	203,570	261,435	319,301
Animal Waste Management System	930,851	1,145,632	1,360,412	1,575,193
Livestock Exclusion	14,226	14,226	14,226	8,923
Tillage Management	178,636	178,636	178,636	152,005
Soil and Water Conservation Plans	35,308	121,533	207,759	293,984
Forest Buffers	4,024	4,277	4,529	4,782
Land Retirement to Open Space	10,394	13,134	15,874	18,614
Grass Buffer	1,649	2,833	4,018	5,203
Pasture Management Composite	199,983	199,983	199,983	178,715

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the Shenandoah/Potomac River Basin in 2024 and the percentage of the WIP III levels completed through 2024.

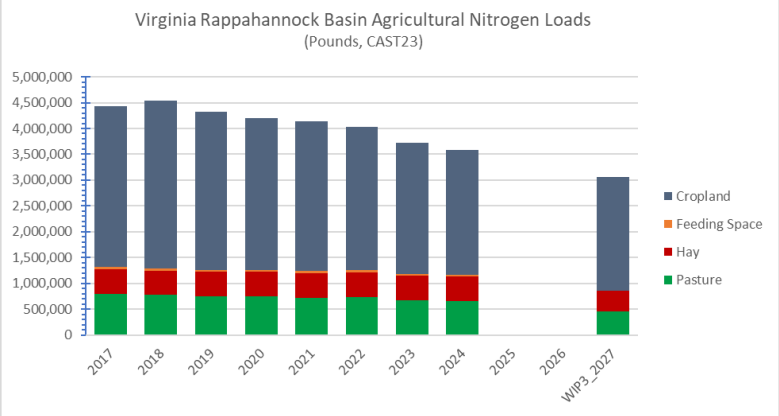
Potomac Top 10 Agricultural BMPs	2024	Percent of WIP Completed	WIP3 2027
Commodity + Cover Crop	62,462	50%	124,346
Nutrient Management Core Nitrogen	145,705	46%	319,301
Animal Waste Management System	930,851	59%	1,575,193
Livestock Exclusion	14,226	159%	8,923
Tillage Management	178,636	118%	152,005
Soil and Water Conservation Plans	35,308	12%	293,984
Forest Buffers	4,024	84%	4,782
Land Retirement to Open Space	10,394	56%	18,614
Grass Buffer	1,649	32%	5,203
Pasture Management Composite	199,983	112%	178,715

APPENDIX C: Progress Report for the Rappahannock River Basin

The graphs below illustrate the progress made by the Commonwealth over the past several years in achieving its pollution reductions in the Rappahannock River Basin. The reductions reflect the substantial financial investments made by the Commonwealth, state and local partners, and producers.

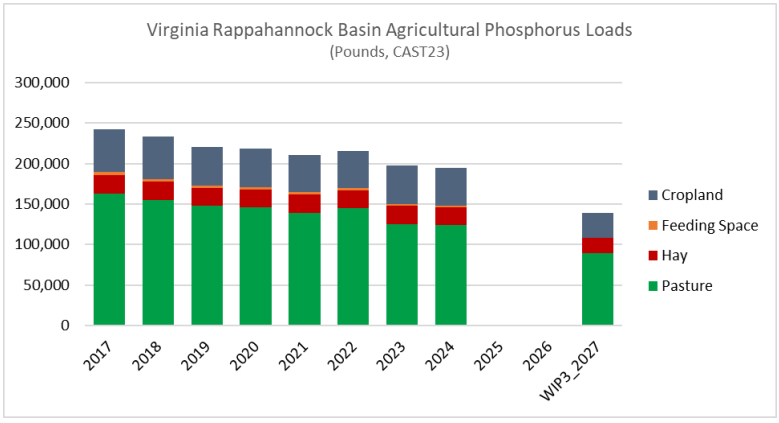
Nitrogen reductions

Since 2017, nitrogen loads delivered to the Chesapeake Bay from agricultural sources in the Rappahannock River Basin have been reduced by more than 846,000 pounds. Nearly 54% of those reductions have been realized in the last two years. This is indicative of a significantly accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



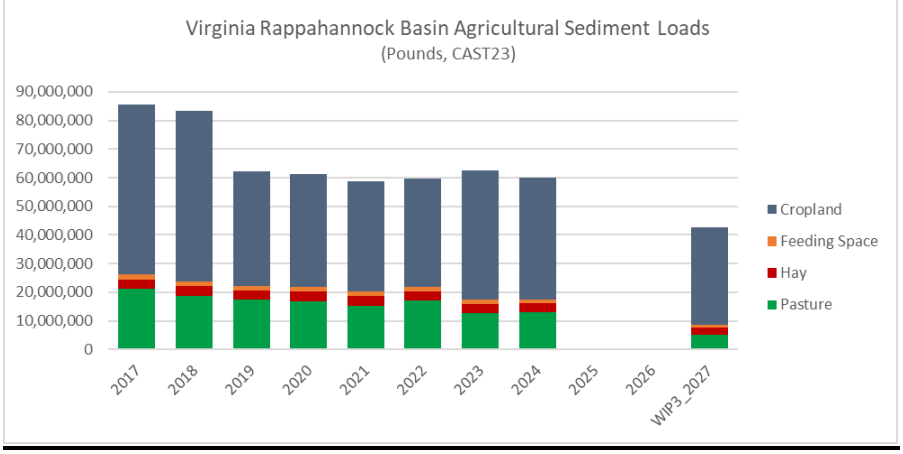
Phosphorus reductions

Since 2017, phosphorus loads delivered to the Chesapeake Bay from agricultural sources in the Rappahannock River Basin have been reduced by more than 48,000 pounds.



Sediment reductions

Since 2017, sediment loads delivered to the Chesapeake Bay from agricultural sources in the Rappahannock River Basin have been reduced by more than 25.7 million pounds. The Commonwealth has already fully met its sediment reduction targets for the Phase III WIP. The bar on the graph below, showing the WIP III levels, indicates the significant additional reductions that could be realized with full implementation of the WIP. These reductions are crucial to ongoing improvements to the health of our local streams and rivers.



Practice implementation progress

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the Rappahannock River Basin from 2017 through 2024.

Rappahannock Top 10 Agricultural BMPs	2017	2018	2019	2020	2021	2022	2023	2024	WIP3 2027
Commodity + Cover Crop	48,742	37,625	38,822	63,318	55,994	75,085	93,738	104,401	91,992
Nutrient Management Core Nitrogen	138,848	136,429	120,784	133,973	141,746	149,669	175,049	156,323	170,889
Animal Waste Management System	3,181	3,037	3,100	3,125	3,008	2,020	7,507	2,938	30,718
Livestock Exclusion	2,615	2,815	3,124	3,583	3,761	3,394	5,148	5,368	12,101
Tillage Management	150,796	147,586	147,197	146,715	145,733	145,204	151,721	150,711	138,441
Soil and Water Conservation Plans					1,205	1,205	46,872	92,775	237,295
Forest Buffers	2,405	1,973	1,766	1,668	1,779	1,695	1,666	1,734	5,012
Land Retirement to Open Space	6,034	5,422	5,407	5,257	5,398	5,587	5,625	5,893	10,072
Grass Buffer	613	540	475	307	942	853	830	852	4,064
Pasture Management Composite	86,991	91,620	94,157	92,549	94,997	90,215	113,035	115,049	77,825

The table below shows the implementation forecast of ten key practice types included in the Commonwealth's Phase III WIP for the Rappahannock River Basin from 2025 through full implementation of the WIP in 2027.

Rappahannock Top 10 Agricultural BMPs	2024	2025 Forecast	2026 Forecast	WIP3 2027
Commodity + Cover Crop	104,401	104,401	104,401	91,992
Nutrient Management Core Nitrogen	156,323	161,178	166,034	170,889
Animal Waste Management System	2,938	12,198	21,458	30,718
Livestock Exclusion	5,368	7,612	9,857	12,101
Tillage Management	150,711	150,711	150,711	138,441
Soil and Water Conservation Plans	92,775	140,948	189,121	237,295
Forest Buffers	1,734	2,827	3,920	5,012
Land Retirement to Open Space	5,893	7,286	8,679	10,072
Grass Buffer	852	1,923	2,994	4,064
Pasture Management Composite	115,049	115,049	115,049	77,825

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the Rappahannock River Basin in 2024 and the percentage of the WIP III levels completed through 2024.

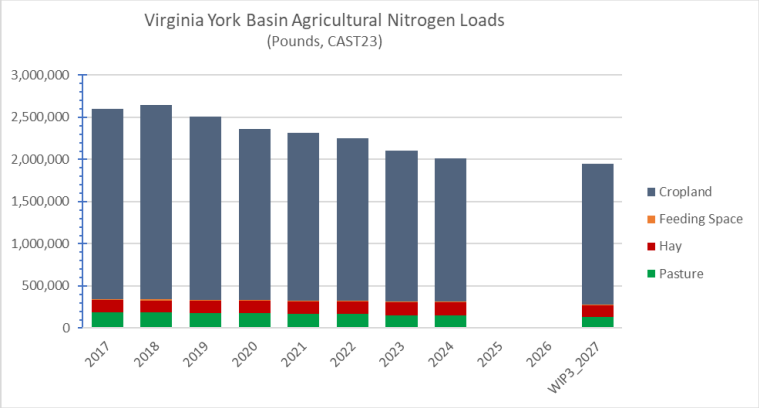
Rappahannock Top 10 Agricultural BMPs	2024	Percent of WIP Completed	WIP3 2027
Commodity + Cover Crop	104,401	113%	91,992
Nutrient Management Core Nitrogen	156,323	91%	170,889
Animal Waste Management System	2,938	10%	30,718
Livestock Exclusion	5,368	44%	12,101
Tillage Management	150,711	109%	138,441
Soil and Water Conservation Plans	92,775	39%	237,295
Forest Buffers	1,734	35%	5,012
Land Retirement to Open Space	5,893	59%	10,072
Grass Buffer	852	21%	4,064
Pasture Management Composite	115,049	148%	77,825

APPENDIX D: Progress Report for the York River Basin

The graphs below illustrate the progress made by the Commonwealth over the past several years in achieving its pollution reductions in the York River Basin. The reductions reflect the substantial financial investments made by the Commonwealth, state and local partners, and producers.

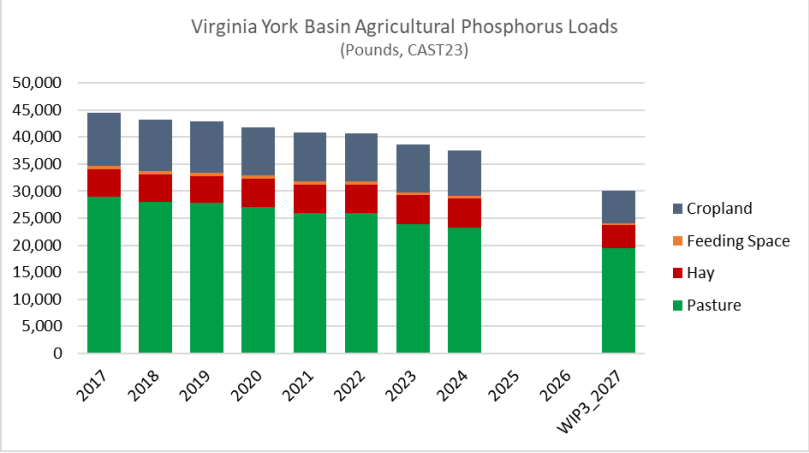
Nitrogen reductions

Since 2017, nitrogen loads delivered to the Chesapeake Bay from agricultural sources in the York River Basin have been reduced by more than 590,000 pounds. More than 40% of those reductions have been realized in the last two years. This is indicative of an accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



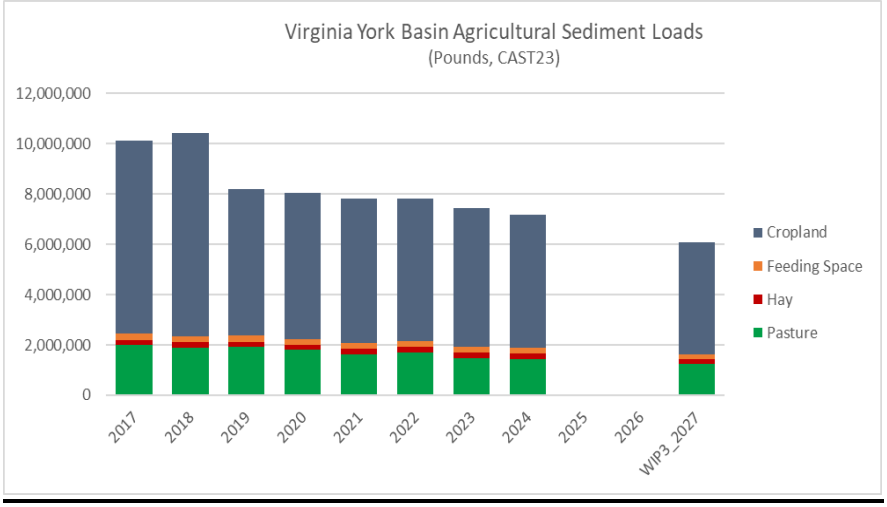
Phosphorus reductions

Since 2017, phosphorus loads delivered to the Chesapeake Bay from agricultural sources in the York River Basin have been reduced by more than 6,000 pounds.



Sediment reductions

Since 2017, sediment loads delivered to the Chesapeake Bay from agricultural sources in the York River Basin have been reduced by more than 2.9 million pounds. The Commonwealth has already fully met its sediment reduction targets for the Phase III WIP. The bar on the graph below, showing the WIP III levels, indicates the significant additional reductions that could be realized with full implementation of the WIP. These reductions are crucial to ongoing improvements to the health of our local streams and rivers.



Practice implementation progress

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the York River Basin from 2017 through 2024.

York Top 10 Agricultural BMPs	2017	2018	2019	2020	2021	2022	2023	2024	WIP3 2027
Commodity + Cover Crop	29,109	35,580	38,516	65,195	70,764	85,633	97,811	108,422	95,735
Nutrient Management Core Nitrogen	108,918	117,153	90,878	140,116	126,837	132,168	147,147	161,396	162,586
Animal Waste Management System	8,125	8,103	3,657	3,544	5,920	5,778	5,997	6,334	30,980
Livestock Exclusion	917	1,009	1,005	1,299	1,379	1,597	2,851	3,227	4,532
Tillage Management	147,636	142,102	135,367	134,958	134,305	134,044	149,065	148,212	139,569
Soil and Water Conservation Plans					841	841	28,251	56,220	185,933
Forest Buffers	1,104	1,088	1,103	1,137	1,169	1,011	961	816	1,905
Land Retirement to Open Space	3,918	3,294	2,588	2,774	2,806	2,775	2,926	3,202	4,906
Grass Buffer	283	232	299	262	809	806	801	810	2,463
Pasture Management Composite	50,745	52,551	52,806	50,407	49,397	47,453	51,595	52,453	32,806

The table below shows the implementation forecast of ten key practice types included in the Commonwealth's Phase III WIP for the York River Basin from 2025 through full implementation of the WIP in 2027.

York Top 10 Agricultural BMPs	2024	2025 Forecast	2026 Forecast	WIP3 2027
Commodity + Cover Crop	108,422	108,422	108,422	95,735
Nutrient Management Core Nitrogen	161,396	161,792	162,189	162,586
Animal Waste Management System	6,334	14,549	22,765	30,980
Livestock Exclusion	3,227	3,662	4,097	4,532
Tillage Management	148,212	148,212	148,212	139,569
Soil and Water Conservation Plans	56,220	99,458	142,695	185,933
Forest Buffers	816	1,179	1,542	1,905
Land Retirement to Open Space	3,202	3,770	4,338	4,906
Grass Buffer	810	1,361	1,912	2,463
Pasture Management Composite	52,453	52,453	52,453	32,806

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the York River Basin in 2024 and the percentage of the WIP III levels completed through 2024.

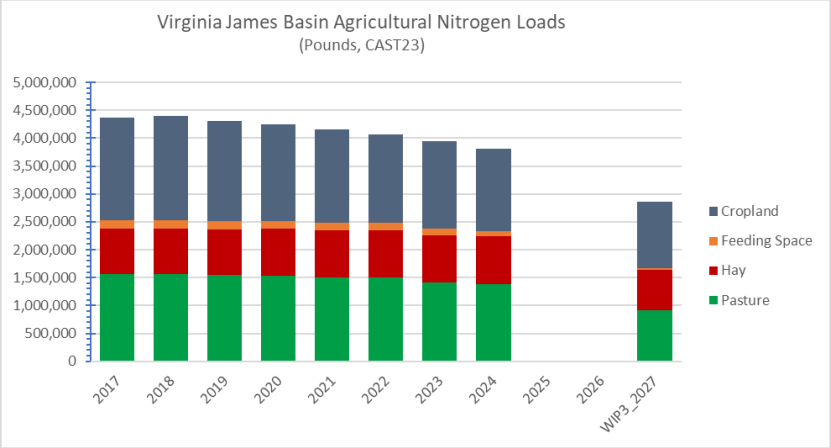
York Top 10 Agricultural BMPs	2024	Percent of WIP Completed	WIP3 2027
Commodity + Cover Crop	108,422	113%	95,735
Nutrient Management Core Nitrogen	161,396	99%	162,586
Animal Waste Management System	6,334	20%	30,980
Livestock Exclusion	3,227	71%	4,532
Tillage Management	148,212	106%	139,569
Soil and Water Conservation Plans	56,220	30%	185,933
Forest Buffers	816	43%	1,905
Land Retirement to Open Space	3,202	65%	4,906
Grass Buffer	810	33%	2,463
Pasture Management Composite	52,453	160%	32,806

APPENDIX E: Progress Report for the James River Basin

The graphs below illustrate the progress made by the Commonwealth over the past several years in achieving its pollution reductions in the James River Basin. The reductions reflect the substantial financial investments made by the Commonwealth, state and local partners, and producers.

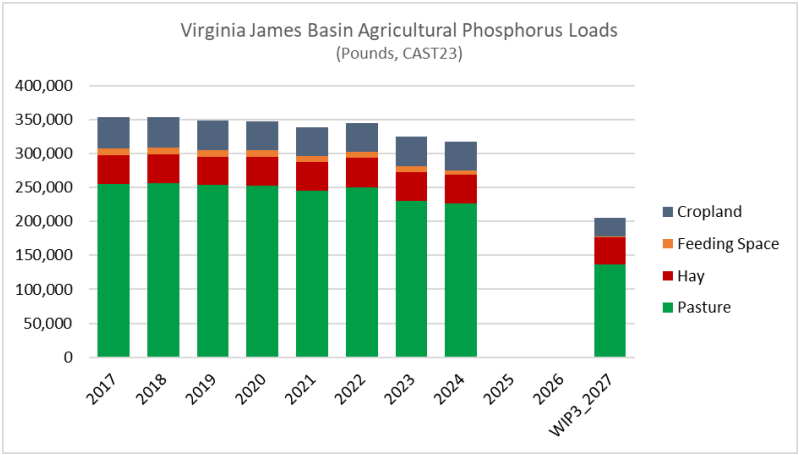
Nitrogen reductions

Since 2017, nitrogen loads delivered to the Chesapeake Bay from agricultural sources in the James River Basin have been reduced by more than 566,000 pounds. Nearly 46% of those reductions have been realized in the last two years; 140,000 pounds of nitrogen was reduced in 2024 alone. This is indicative of an accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



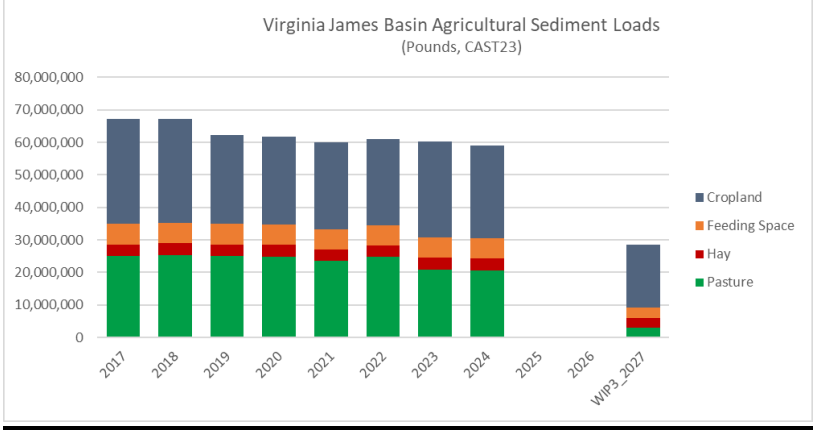
Phosphorus reductions

Since 2017, phosphorus loads delivered to the Chesapeake Bay from agricultural sources in the James River Basin have been reduced by more than 36,000 pounds.



Sediment reductions

Since 2017, sediment loads delivered to the Chesapeake Bay from agricultural sources in the James River Basin have been reduced by more than 8.1 million pounds. The Commonwealth has already fully met its sediment reduction targets for the Phase III WIP. The bar on the graph below, showing the WIP III levels, indicates the significant additional reductions that could be realized with full implementation of the WIP. These reductions are crucial to ongoing improvements to the health of our local streams and rivers.



Practice implementation progress

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the James River Basin from 2017 through 2024.

James Top 10 Agricultural BMPs	2017	2018	2019	2020	2021	2022	2023	2024	WIP3 2027
Commodity + Cover Crop	39,746	39,479	38,152	57,704	59,246	77,439	86,558	97,843	97,455
Nutrient Management Core Nitrogen	140,721	131,141	114,143	124,450	131,355	151,531	164,966	195,215	253,142
Animal Waste Management System	39,584	43,733	41,346	45,237	48,286	54,285	74,805	149,772	402,331
Livestock Exclusion	4,775	4,821	4,793	5,767	6,581	7,564	12,498	15,164	46,470
Tillage Management	140,295	136,556	136,410	135,333	134,029	133,343	118,942	117,315	128,450
Soil and Water Conservation Plans					2,394	2,393	17,263	33,262	428,267
Forest Buffers	6,331	6,062	6,034	6,143	6,486	6,664	6,458	6,065	7,957
Land Retirement to Open Space	11,496	10,123	8,983	8,592	8,387	6,424	6,242	6,560	16,577
Grass Buffer	921	837	818	710	1,697	1,603	1,471	1,520	12,065
Pasture Management Composite	219,680	217,980	218,425	205,061	209,202	197,429	234,118	230,596	253,844

The table below shows the implementation forecast of ten key practice types included in the Commonwealth's Phase III WIP for the James River Basin from 2025 through full implementation of the WIP in 2027.

James Top 10 Agricultural BMPs	2024	2025 Forecast	2026 Forecast	WIP3 2027
Commodity + Cover Crop	97,843	97,843	97,843	97,455
Nutrient Management Core Nitrogen	195,215	214,524	233,833	253,142
Animal Waste Management System	149,772	233,958	318,144	402,331
Livestock Exclusion	15,164	25,599	36,034	46,470
Tillage Management	117,315	121,027	124,739	128,450
Soil and Water Conservation Plans	33,262	164,931	296,599	428,267
Forest Buffers	6,065	6,696	7,326	7,957
Land Retirement to Open Space	6,560	9,899	13,238	16,577
Grass Buffer	1,520	5,035	8,550	12,065
Pasture Management Composite	230,596	238,345	246,095	253,844

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the James River Basin in 2024 and the percentage of the WIP III levels completed through 2024.

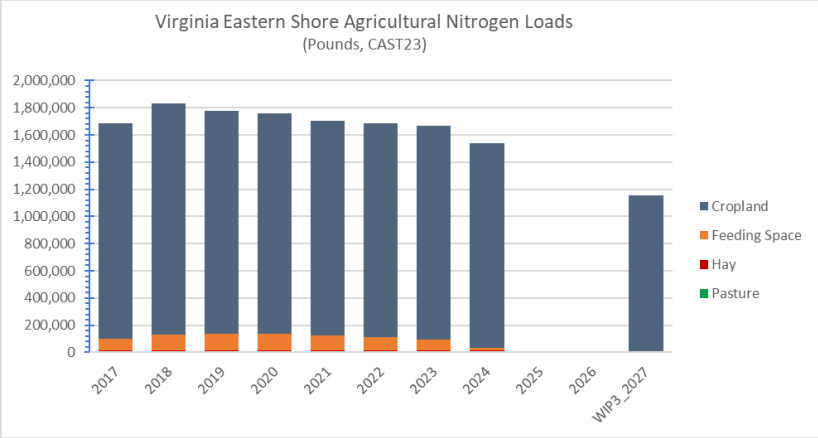
James Top 10 Agricultural BMPs	2024	Percent of WIP Completed	WIP3 2027
Commodity + Cover Crop	97,843	100%	97,455
Nutrient Management Core Nitrogen	195,215	77%	253,142
Animal Waste Management System	149,772	37%	402,331
Livestock Exclusion	15,164	33%	46,470
Tillage Management	117,315	91%	128,450
Soil and Water Conservation Plans	33,262	8%	428,267
Forest Buffers	6,065	76%	7,957
Land Retirement to Open Space	6,560	40%	16,577
Grass Buffer	1,520	13%	12,065
Pasture Management Composite	230,596	91%	253,844

APPENDIX F: Progress Report for the Eastern Shore

The graphs below illustrate the progress made by the Commonwealth over the past several years in achieving its pollution reductions in the Eastern Shore. The reductions reflect the substantial financial investments made by the Commonwealth, state and local partners, and producers.

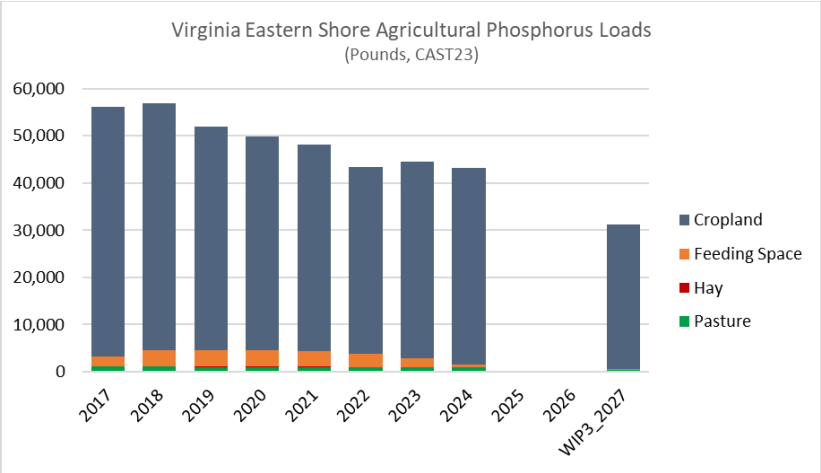
Nitrogen reductions

Since 2017, nitrogen loads delivered to the Chesapeake Bay from agricultural sources in the Eastern Shore have been reduced by more than 146,000 pounds. Nearly 84% of those reductions have been realized in 2024 alone. This is indicative of a significantly accelerating pace of reductions that is closely correlated with the significant increases in funding provided for the VACS Program.



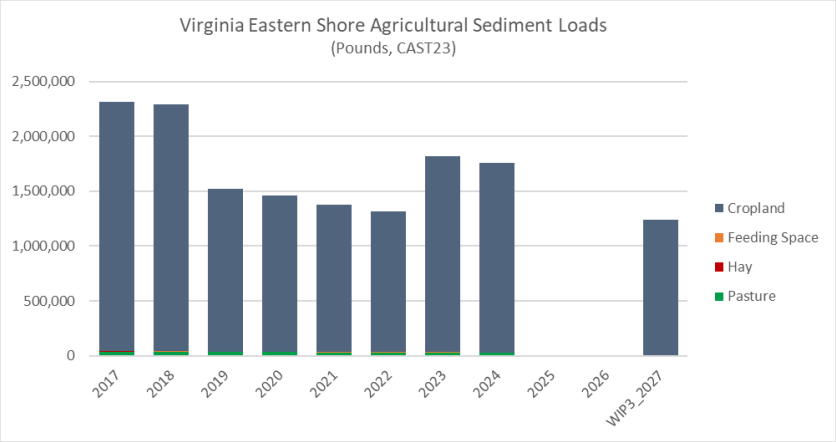
Phosphorus reductions

Since 2017, phosphorus loads delivered to the Chesapeake Bay from agricultural sources in the Eastern Shore have been reduced by more than 12,000 pounds.



Sediment reductions

Since 2017, sediment loads delivered to the Chesapeake Bay from agricultural sources in the Eastern Shore have been reduced by more than 0.5 million pounds. The Commonwealth has already fully met its sediment reduction targets for the Phase III WIP. The bar on the graph below, showing the WIP III levels, indicates the significant additional reductions that could be realized with full implementation of the WIP. These reductions are crucial to ongoing improvements to the health of our local streams and rivers.



Practice implementation progress

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the Eastern Shore from 2017 through 2024.

Eastern Shore Top 10 Agricultural BMPs	2017	2018	2019	2020	2021	2022	2023	2024	WIP3 2027
Commodity + Cover Crop	10,661	7,809	11,669	18,404	20,399	24,204	27,096	27,564	34,030
Nutrient Management Core Nitrogen	36,722	23,464	16,030	33,412	37,104	36,460	39,549	34,873	45,477
Animal Waste Management System	49,498	11,249	11,246	11,294	24,503	43,125	72,387	132,639	189,678
Livestock Exclusion	15	15	15	15	16	14	14	14	130
Tillage Management	47,908	47,198	46,451	46,869	47,156	47,706	43,989	44,031	49,580
Soil and Water Conservation Plans					184	184	6,606	12,401	37,981
Forest Buffers	238	173	171	171	218	199	140	167	2,309
Land Retirement to Open Space	547	481	427	393	370	339	274	117	283
Grass Buffer	211	124	103	88	243	174	174	177	264
Pasture Management Composite	125	110	99	50	53	42	35	32	212

The table below shows the implementation forecast of ten key practice types included in the Commonwealth's Phase III WIP for the Eastern Shore from 2025 through full implementation of the WIP in 2027.

Eastern Shore Top 10 Agricultural BMPs	2024	2025 Forecast	2026 Forecast	WIP3 2027
Commodity + Cover Crop	27,564	29,720	31,875	34,030
Nutrient Management Core Nitrogen	34,873	38,408	41,942	45,477
Animal Waste Management System	132,639	151,652	170,665	189,678
Livestock Exclusion	14	53	91	130
Tillage Management	44,031	45,880	47,730	49,580
Soil and Water Conservation Plans	12,401	20,927	29,454	37,981
Forest Buffers	167	881	1,595	2,309
Land Retirement to Open Space	117	172	228	283
Grass Buffer	177	206	235	264
Pasture Management Composite	32	92	152	212

The table below shows the implementation levels of ten key practice types included in the Commonwealth's Phase III WIP for the Eastern Shore in 2024 and the percentage of the WIP III levels completed through 2024.

Eastern Shore Top 10 Agricultural BMPs	2024	Percent of WIP Completed	WIP3 2027
Commodity + Cover Crop	27,564	81%	34,030
Nutrient Management Core Nitrogen	34,873	77%	45,477
Animal Waste Management System	132,639	70%	189,678
Livestock Exclusion	14	11%	130
Tillage Management	44,031	89%	49,580
Soil and Water Conservation Plans	12,401	33%	37,981
Forest Buffers	167	7%	2,309
Land Retirement to Open Space	117	42%	283
Grass Buffer	177	67%	264
Pasture Management Composite	32	15%	212