

MARYLAND NUTRIENT MANAGEMENT PROGRAM



Fiscal Year 2023 | ANNUAL REPORT





Message from Secretary Atticks

2023 was a pivotal year for the Nutrient Management Program. In June 2023, I set the wheels in motion to update and modernize the Agricultural Nutrient Management Program.

Our goal is to enhance the University of Maryland's plan-writing services, update the NuMan Pro nutrient management planning software program, and actively seek farmer input on needed program enhancements. By effectively managing nutrients to enhance water quality, farmers contribute to a healthier environment and reap financial benefits through reduced fertilizer costs. We aim to ensure every farmer has access to a nutrient management plan, enabling them to run their farms more efficiently and sustainably.

On the urban front, our department is committed to providing turfgrass professionals with relevant training and education programs. We understand the importance of meeting client expectations, but we also prioritize the need to safeguard our Chesapeake Bay from the adverse effects of excess nutrients. This balance is crucial to our mission of promoting sustainable turfgrass management.

The following report includes a summary of our accomplishments during Fiscal Year 2023. Please read on to learn what we do and how we are working to improve our services and the health of our Chesapeake Bay.



Kevin Atticks, D.C.D.

Maryland Agriculture Secretary

About the Nutrient Management Program

The Nutrient Management Program protects water quality in local streams and the Chesapeake Bay and helps reduce nitrogen losses to the atmosphere that contribute to climate change. It does this by regulating the amount, timing, rate, and placement of commercial fertilizer products and organic nutrient sources used by Maryland farmers to grow crops, and by lawn care professionals to fertilize lawns. The program's team of nutrient management specialists works closely with poultry, dairy, and other livestock producers to ensure that animal manure is managed to protect water quality while minimizing nitrogen losses to the atmosphere. Guidance is provided by the Nutrient Management Advisory Committee.

Hot Topics

Food Processing Residuals

The use of Food Processing Residuals (FPRs) as a source of nutrients for cropland applications remains a contentious issue due to odor complaints from neighbors during spreading and storage. FPRs are waste products left over from the food manufacturing process and are primarily included in wastewater products from poultry, milk, and seafood processing. FPRs are registered in Maryland as soil amendments that provide agronomic benefits. Over the last year, conflicts between a few farm operators and their neighbors escalated to new levels, prompting MDA and others to consider alternative ways to regulate the land application of FPRs. The department anticipates FPRs will dominate nutrient management priorities in Fiscal Year 2024

University of Maryland Plan Writing Services

During the last half of the fiscal year, MDA and the University of Maryland (UMD) began a dialogue on the effectiveness of UMD's plan writing program. The discussion was prompted by UMD's difficulty meeting farmer demand for nutrient management plans due to persistent staff vacancies. On June 1, 2023, MDA announced that it planned to introduce a new plan-writing model that would provide farmers with cost-

share assistance to hire private certified consultants to prepare their nutrient management plans. Funding for the cost-share program would be diverted from the UMD plan-writing program. To gain farmer and industry input on the move, MDA scheduled a series of regional listening sessions culminating in a Nutrient Management Summit scheduled for July 2024 in Anne Arundel County.

Phosphorus Research Funding

- **Phosphorus Management Research**

Work continued on a five-year University of Maryland study of phosphorus loss risk assessment tools. The study involves 15 selected sites for edge-of-field runoff and phosphorus loss monitoring. Site instrumentation includes autosamplers, pressure transducers, suction cup lysimeters, and rain gauges, all used to measure phosphorus loss from fields during rain events. More than 3,200 runoff samples were collected to analyze dissolved and total phosphorus.

- **Soil Additives Study**

Research moved forward on an MDA-funded study to help determine the value of soil additives in preventing soil phosphorus loss. The UMD Center for Environmental Science is conducting this study.



Agricultural Nutrient Management Program

Farms that generate \$2,500 or more in gross income or have 8,000 pounds or more of live animal weight are required to follow nutrient management plans when fertilizing crops and managing animal manure. These plans are prepared by University of Maryland Extension advisors, certified private consultants, or farmers who are certified to develop plans for their own operations. Each plan specifies how much fertilizer, manure, or other nutrient sources may be safely applied to crops to achieve yields and prevent excess nutrients from impacting waterways. Program staff ensure plans are developed, updated, and followed according to state regulations. This program is authorized by the Water Quality Improvement Act of 1998.

Compliance and Enforcement

Nutrient Management Plan Submissions

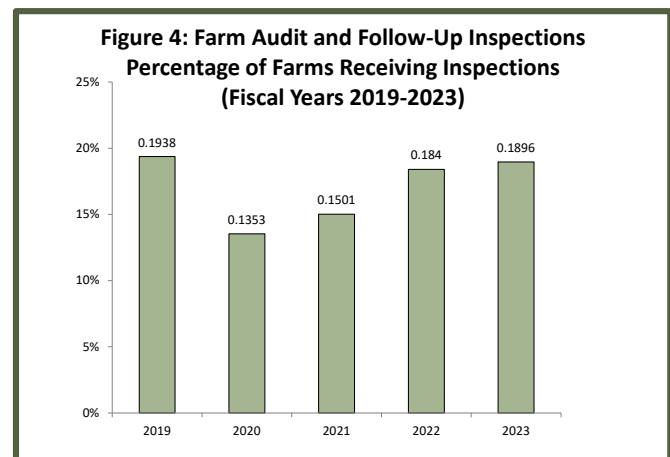
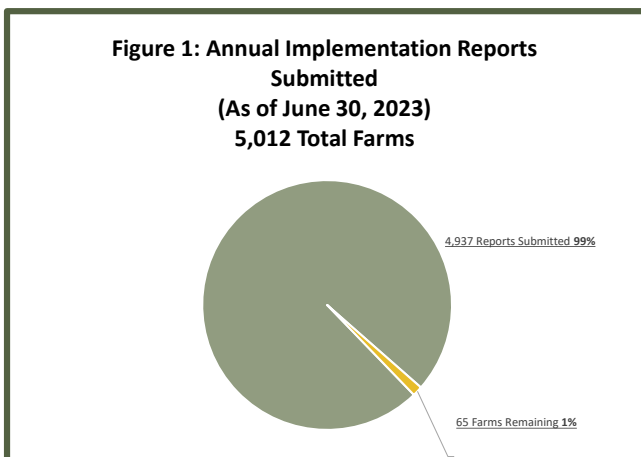
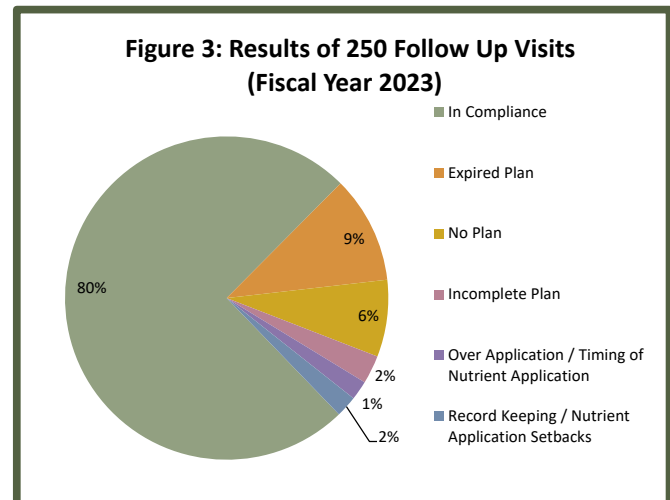
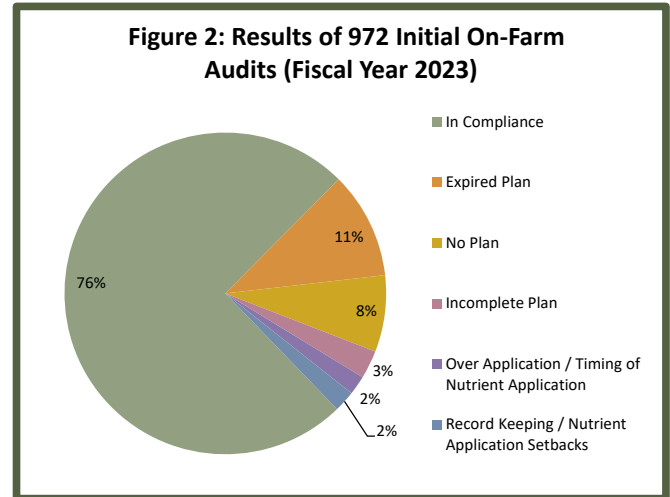
New farming operations must submit copies of their initial nutrient management plans to the department. The program works to locate new farming operations and pursues enforcement actions against operators who have not met this initial requirement.

Annual Implementation Reports (AIRs)

AIRs are due to the department by March 1. These reports summarize nutrient applications for the previous calendar year. By the end of Fiscal Year 2023, the program received 4,937 AIRs, representing 99% of regulated farmers. Approximately \$65,000 in fines were issued to 65 operators for late or missing reports. The program is working to bring these farms into compliance.

On-Farm Audits and Inspections

Nutrient management specialists conducted 972 on-farm audits, representing 18.9% of regulated farms. 76% of audited farms were in full compliance during the initial inspection. Follow-up inspections determined that 47 farmers cited had corrected their violations, raising the compliance rate to 80%. The program is actively pursuing full compliance for all audited operations. During the fiscal year, \$30,250 in fines were issued against 25 operators who did not correct violations cited.



Certification, Licensing and Education

A training, certification, and licensing program is available for consultants who want to develop state-approved nutrient management plans for farmers. In addition, Farmer Training and Certification (FTC) is offered to farmers who want to become certified to prepare their own nutrient management plans. A range of continuing education opportunities are provided throughout the year. The following activities took place in Fiscal Year 2023:

Certified Consultant Program

The program trains and certifies consultants to provide farmers with nutrient management plans that balance nutrient inputs with crop requirements. In Fiscal Year 2023, the program certified 23 new consultants to write nutrient management plans for farmers and renewed 171 certifications.

University of Maryland Consultant Program

The department funded 20 University of Maryland advisors in Fiscal Year 2023. These advisors provide farmers with nutrient management plans free of charge.

Farmer Training and Certification

The Nutrient Management Program and University of Maryland Extension train and certify farmers who want to become certified to write nutrient management plans for their own operations. Regional workshops are offered for farmers managing livestock, poultry, crop, and nursery and greenhouse operations. To become certified, farmers must learn the basics of nutrient management planning, pass a specialized

nutrient management exam, and work with a nutrient management specialist or Extension advisor to develop their plans. During the year, 7 farmers were trained to write nutrient management plans for their own operations and 23 certifications were renewed.

Nutrient Applicator Voucher Training

Farmers who apply nutrients to 10 or more acres of cropland are required to attend an applicator training course once every 3 years. The program partners with the University of Maryland Extension to conduct a series of statewide voucher training sessions. During the year, 747 vouchers were issued or renewed.

Continuing Education

Certified consultants are required to earn 12 hours of continuing education credits every 3 years. During the year, 194 continuing education events were attended by 3,467 individuals.



Turfgrass Nutrient Management Program

This program trains, certifies, and licenses individuals and companies hired to apply lawn fertilizer to nonagricultural land. The training and certification program—developed in partnership with the University of Maryland Extension—focuses on fertilizer application techniques, soil science, and best management practices for lawns. A compliance program ensures that fertilizer applications are made following the University of Maryland application and timing recommendations. Homeowner outreach is conducted jointly with the University of Maryland Extension. This program is authorized by the Fertilizer Use Act of 2011. The following activities took place in Fiscal Year 2023:

Environmental Justice

The Nutrient Management Program is committed to the fair and equitable treatment of all farm operators and works extensively with minority workers that dominate the lawn care industry. The Turfgrass Program has partnered with the Baltimore City Extension Office to offer free training and certification for high school students who want to pursue a career in turfgrass management.

Electronic Reporting

Maryland businesses continued to take advantage of electronic reporting. In Fiscal Year 2023, 56% of licensed companies filed their annual reports electronically through the Maryland OneStop portal.

Fertilizer Applicator Exams

Four professional fertilizer applicator exams were offered across the state and attended by 106 lawn care professionals. The program issued 865 business licenses and 1,485 Professional Fertilizer Applicator Certificates. An additional 1,428 lawn care company employees have been trained to apply fertilizer under the supervision of a certified professional.

To renew their certificates, professional fertilizer applicators are required to complete two hours of continuing education each year. Thirty recertification classes were attended by 1,268 certified professionals in Fiscal Year 2023. Additional training opportunities were offered by private industry and trade groups. Many of these training sessions were offered virtually.

Annual Activity Reports

License holders are required to file annual activity reports with the program by March 1, covering the previous year. In Fiscal Year 2023, the program received 754 activity reports representing a 91% compliance rate.

Enforcement Activities

During the year, 152 record reviews were conducted, with 78% of the firms in compliance. Both electronic and on-site reviews were conducted.

Homeowner Outreach

The program continued to educate citizens about Maryland's Lawn Fertilizer Law through a partnership with the University of Maryland Master Gardeners and consumer outreach activities at public events.





Maryland Department of Agriculture

Nutrient Management Program

WESTERN MARYLAND

Allegany, Garrett, and Washington counties

P.O. Box 459
Hancock, MD 21750
410-279-3506

Carroll and Frederick counties

92 Thomas Johnson Drive, Suite 110
Frederick, MD 21702
410-353-4320

CENTRAL AND SOUTHERN MARYLAND

Anne Arundel, Howard and Montgomery counties

92 Thomas Johnson Drive, Suite 110
Frederick, MD 21702
410-507-4811

Baltimore and Harford counties

P.O. Box 850
Forest Hill, MD 21050
Bel Air, MD 21014
443-223-0403

Calvert, Charles, Prince George's and St. Mary's counties

P.O. Box 652
Leonardtown, MD 20650
410-980-9479

Turfgrass Nutrient Management Program

50 Harry S. Truman Parkway
Annapolis, MD 21401
410-841-5959

EASTERN SHORE

Cecil and Kent counties

50 Harry S. Truman Parkway
Annapolis, MD 21401
410-991-3114

Caroline, Queen Anne's and Talbot counties

P.O. Box 549
Cordova, MD 21625
410-279-4003

Dorchester, Somerset, Wicomico, and Worcester counties

P.O. Box 340
Marydel, MD 21649
410-353-5660

Concentrated Animal Feeding Operations - Statewide

27722 Nanticoke Road, Unit 2
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410-507-4949



Maryland
Department of Agriculture

Nutrient Management Program

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