



Kevin Atticks, Secretary

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2024– Annual Status Report on Climate Change

In accordance with §2-1305 of the Maryland Environment Article

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The Maryland Department of Agriculture (MDA) is a member of the Maryland Commission on Climate Change (MCCC), and works collaboratively with the Maryland Department of the Environment (MDE), other state agencies, and partners to develop and achieve plans to address climate change. Accordingly, MDA submits the information below on its programmatic efforts to advance the resilience and mitigation potential of Maryland’s approximately two million acres of agricultural lands.

MDA seeks to safeguard Maryland’s network of natural areas, agricultural lands, and coastal zones through its established conservation programs and practices. Land conservation offers an important mechanism for mitigating and adapting to climate change. Well managed croplands, grasslands and forests provide direct benefits in greenhouse gas (GHG) emission reductions and an opportunity to mitigate emissions associated with more developed areas. In addition, MDA encourages the development of innovative technologies geared toward helping the state reach its climate goals and facilitating career development.

MDA continues to pursue policies and programs that curb the conversion of agricultural lands and encourage the conservation of natural resources while also working with the Maryland Department of Natural Resources (DNR), Maryland Department of Planning (MDP), and other partners to promote the preservation and restoration of forested, grassed, and wetland areas on agricultural lands.

The Department continues to make strides in its efforts to support farmers, climate-smart practices, and land preservation. Ahead of the curve, MDA has surpassed the state goal of 30x30 goal, achieving 30% of land conservation six years earlier, and will now strive for 40% preservation. MDA’s newer programs, such as the Healthy Soils Program and the Small and Urban Farm programs, continue to see an increase in interest among farmers. Across programs in 2024, MDA recorded over 3,000 acres in *Cover Crop Plus*, in addition to the 450,000 acres planted under MDA’s traditional cover crop program, and awarded approximately \$993,000 to its Healthy Soils Competitive Fund awardees. MDA asserts that the farmers in the state have been enthusiastic adopters of key climate-smart practices, making significant contributions to the soil carbon sequestration and emissions reduction in the state. Non-federal expenses in MDA’s Resource Conservation programming totaled \$60.5 million in fiscal year 2024, with 99% of funding reportable for GHG reduction efforts. The distribution of those funds benefitting disproportionately affected and climate vulnerable communities accounted for 28% of funding, a substantial increase from the previous year.

I. Enhancing Sequestration Activities

Maryland farmers have made, and continue to make, significant contributions in enhancing the carbon sequestration of the state's natural working lands. Efforts regarding sequestration activities are outlined in the following section. MDA aims to build on its current efforts and programs as the need for further climate mitigation and adaptation rises. Future sequestration efforts include advancing demonstration sites and education on agroforestry practices, program development and/or support for salt water inundation and sustainable retirement of marginal working lands in climate vulnerable communities, and the development of dual-use energy generation (agrivoltaics) recommendations on agricultural land.

A. Maryland Agricultural Land Preservation Foundation (MALPF)

The Maryland Agricultural Land Preservation Foundation (MALPF) program is MDA's flagship program for the purchase of permanent preservation easements, and is one of the most successful programs of its kind in the country. Besides maintaining prime farmland and woodland as a viable local base of food and fiber production, the protection of agricultural land reduces urban development pressures, safeguards wildlife habitat, and enhances the ecology of the Chesapeake Bay and its tributaries.

Maryland has multiple land preservation goals established through legislation. In 2021, House Bill 860 was signed into law that established a goal to preserve 1,030,000 acres of productive agricultural lands by 2030 through a combination of State and County easement preservation programs.

More recently, the Maryland the Beautiful Act was enacted in 2023. This act recognizes the multiple benefits derived from protected lands throughout the state, and established ambitious land conservation goals. The act established the state goal to conserve 30% of the state by 2030 and to conserve 40% of the state by 2040. As of January 1, 2024, the first goal to conserve 30% has already been achieved - six years early! Achieving 40x40 will be much more challenging and will depend on future funding for land preservation programs, willing sellers, and continued cooperation from all state, local, and federal partners.

2024 Milestones

- Through fiscal year 2024, 2,757 farms have been protected and land has been preserved in each of Maryland's 23 counties at a public investment of over \$972 million;
- MALPF's preserved acres total 370,013 as of June 30, 2024; and
- As of August 2024, MALPF had settled 83 of the total 88 easement offers in the fiscal year 2022 application cycle; 78 out of 111 of the the fiscal year 2023 application cycle, and entered into 104 contracts to purchase agricultural easements in the fiscal year 2024 application cycle. These easement purchases bring a welcome influx of funds to the landowners of newly MALPF-eased farms, as well as into the agriculture industry at large.

Funding

MALPF's purchases are funded by dedicated percentages of the Real Estate Transfer Tax and the Agricultural Transfer Tax, along with county allocations. Additionally, The Great Maryland

Outdoors Act, passed in 2022, provided a one-time appropriation of ~\$16.5 million to the MALPF Fund in fiscal year 2024. These funds, added to the MALPF's portion of the Real Estate Transfer Tax, resulted in a record high single year budget for the MALPF Program, enabling many more farmers to sell easements and permanently protect the land than in past years.

Enhancement Opportunities

MDA is actively working to best align existing preservation and conservation programs in support of the state's climate goals. For example, MALPF-preserved farms are able to help the State of Maryland meet its renewable energy goals by establishing alternative/renewable energy systems on their properties for their agricultural and residential energy needs. MALPF policy allows for the installation and use of these systems, provided that the energy generated does not exceed 125% of the energy used on an annual basis, for residential and agricultural uses. Landowners are also allowed to be reimbursed by the energy utility/provider for excess power generated.

Challenges

From fiscal year 2019 through 2024, MALPF enjoyed the funding benefits of a strong real estate market, which more than doubled MALPF's budget during that period. The slow down of the real estate market the last few years has made an impact on the MALPF budget with a significant decrease to the fiscal year 2025 budget. Due to the significant decrease in budget, the MALPF Board decided to return to a 2-year application cycle by combining the fiscal year 2025 and 2026 budgets into a single application cycle. This will ultimately result in a slow-down of easement acquisitions, even as the demand for participation in MALPF remains high.

B. Retirement of Marginal and Sensitive Farmland

Conservation Reserve Enhancement Program and Conservation Buffer Initiative

The state of Maryland has participated in the federal-state Conservation Reserve Enhancement Program (CREP) since 1997. CREP aims to target high-priority conservation concerns by offering rental payments for 10- to 15-year set-aside contracts, and other incentives to agricultural producers to protect environmentally sensitive lands, improve wildlife habitat, and reduce nutrient and sediment loss. Currently Maryland landowners can receive four types of payments: a one-time signing bonus, annual rental payments that include a per-acre incentive, cost share assistance, and a one-time practice incentive payment.

CREP goals for Maryland are to achieve 100,000 acres for water quality and wildlife benefits, including converting up to 16,000 acres of marginal land into grass, shrubs, and trees, establish 77,000 acres of grassland and forest buffers and 5,000 acres of water and wetland habitat, and restore 2,000 acres of habitat for declining, threatened, or endangered species.

To complement CREP, MDA initiated a state program known as the Conservation Buffer Initiative (CBI) in fiscal year 2021 to advance additional riparian buffer plantings. The CBI program is designed to offer flexible management and contract terms for operators and landowners.

Both CREP and CBI allow riparian buffers to address water quality and habitat, but increasingly MDA is [promoting](#) riparian forest buffers and upland tree plantings to leverage greater carbon sequestration benefits and address the state's 5 Million Tree Goal by 2031.

2024 Milestones

- As of September 2024, CREP enrollment in Maryland was at approximately 39,000 acres, a continued decline in the federal program;
- During fiscal year 2024, MDA provided cost-share for 36 CREP-related projects, totaling \$443,692 in payments;
- The CBI program remains a popular state alternative program for riparian buffers. The FY24 resulted in 26 new contracts totaling \$457,248 in payments with an increase in contracts for riparian forest buffers;
- Bonus payments for riparian buffers, through CREP and CBI, are provided by MDA as an ecosystem incentive for adoption. Payments in FY24 totaled \$721,779;
- MDA also continues to offer an upland tree planting bonus of \$2 per tree along with up to 100% cost-share to install the others plantings; and
- MDA reported planting an additional 54,870 trees during fiscal year 2024 in support of the 5 Million Trees goal.

Funding

The federal monies toward CREP vary with authorized funding and participation levels based on USDA incentives administered through its Farm Service Agency, while the Maryland Agricultural Water Quality Cost Share Program (MACS) offers grants, which are financed by state bond funds, to provide up to 100% of the costs to install high priority best management practices. The Conservation Buffer Initiative and state signing incentive payments, administered by MDA, are funded through the Chesapeake and Atlantic Coastal Bays Trust Fund and the Tree Solutions Now Act of 2021.

Enhancement Opportunities

MDA continues to engage with state agencies and federal partners to advance buffer and upland plantings. The Maryland CBI program is popular and offers flexibility that can complement CREP enrollments. Likewise, the agency is considering increasing opportunities to work with farm operators and landowners affected by sea level rise and saltwater inundation. The pace of these changes are requiring adaptation measures to support transitioning growers as the lands become unproductive.

Beyond buffer plantings in marginal lands, MDA is also seeing increased interest in agroforestry projects that would add and/or diversify working landscapes with tree crop plantings. MDA is working with DNR Forest Service to plan and implement demonstration projects, as well as increase technical assistance to interested producers.

Challenges

Annual CREP enrollment continues to decline since a peak enrollment of ~74,500 acres in 2008. While many factors influence participation, the perception is many farm operators are less willing to enter into the lengthy contracts typical of CREP. Further hindering enrollment is the

delay of a new federal Farm Bill with authority for new CREP enrollments, i.e. no new CREP contracts can be executed. MDA will continue the Conservation Buffer Initiative to address demands for buffer plantings. Additionally, MDA sees strong opportunities with working lands through agroforestry. Further alignment of popular plantings with the eligible (currently, natives only) planting list for the 5 Million Tree goal would benefit the state.

C. Healthy Soils Program

The 2017 Healthy Soils Act charged MDA with the development of a Healthy Soils Program to improve the health, yield, and profitability of Maryland's soils and promote the further adoption of conservation practices that foster soil health while increasing sequestration capacity. In support of this initiative, MDA initially collaborated with stakeholders from the Healthy Soils Consortium to complete a comprehensive scientific literature review to identify those practices that are most effective at improving soil health and building soil carbon stocks. Information from this literature review was used to create a menu of Maryland-specific conservation practices that advance soil health.

Subsequently, in 2019, the Soil Health Advisory Committee was formed to serve as a more formal advisory body to MDA. Starting from the menu of Maryland-specific conservation practices, the Advisory Committee developed further recommendations on how conservation practices and programs would advance the objectives of the Healthy Soils Program. Recommendations were submitted to MDA leadership in January 2022, and resulted in the roll out the [Cover Crop Plus](#) program in summer 2022, to leverage the success of cover cropping in the state and encourage earlier planting, later termination, and multi-year planning for soil health. A second program, [the Healthy Soils Competitive Fund](#), was launched in winter 2023 to encourage innovative soil health management. Both programs capitalize on co-benefits for air and water quality and carbon sequestration that build upon Maryland's nationally recognized progressive farming practices and programs.

In addition to programmatic goals, MDA is focused on method(s) to best quantify outcomes from the Healthy Soils Program, with an intent to address farmer inquiries but also improve the state's GHG inventory by better reporting of the state's natural carbon sinks. Interest in both programs and practices are steadily increasing.

2024 Milestones

- *Cover Crop Plus* enrollment through fiscal year 2024 included 16 agreements, totaling approximately 3,342 acres;
- The FY24 Healthy Soils Competitive Fund resulted in 57 applications of which 23 awardees were selected for an obligation of approximately \$993,000;
- Soil health evaluations on participating farms in the Healthy Soils Program remain in progress to develop metric(s) to best quantify soil health outcomes; and
- MDA, in partnership with MDE and the US Climate Alliance, initiated a project to develop protocols to estimate the historic contribution of Maryland's agricultural soils (2006-present) using COMET modeling tools. **Initial results demonstrate Maryland farmers have made significant contributions to soil carbon sequestration in past decades** through adoption of key practices - conservation tillage, nutrient management, and diverse cover crops. Adoption of these practices on 80% of cropland is estimated to remove 0.9 MMTCO_{2e} annually in future years.

Funding

The Climate Solutions Now Act of 2022 specifies an appropriation of \$500,000 in the governor's budget from FYs 2024-2028 for the MDA Healthy Soils Program. For FY24, funding from the Chesapeake and Atlantic Coastal Bays Trust Fund was also utilized for the program.

Funds through USDA-Regional Conservation Partnership Program are fully obligated and grant funds from the National Fish and Wildlife Foundation will conclude in calendar year 2025.

Recently it was announced the Atlantic Conservation Coalition, a multi-state partnership including Maryland, was established to focus on leveraging the carbon sequestration power of each state's natural working lands. The coalition is funded by the US EPA Climate Pollution Reduction Grant (CPRG). As a subrecipient of the CPRG, MDA will receive approximately \$5 million beginning in the 2025 calendar year in order to implement 1,000 acres of additional agroforestry practices on farms. Adoption of agroforestry practices on farming operations remains low; data from the 2017 USDA Census of Agriculture indicates that only about 3.8% of farming operations in Maryland report implementing agroforestry practices. CPRG funding will be applied towards the further expansion of the department's Healthy Soils program and the implementation of agroforestry.

Enhancement Opportunities and Challenges

Unpredictable market conditions for crops and farm inputs have made producers hesitant to commit to additional long term conservation practice implementation. Programming will have to be adaptive to producer needs, while pursuing the best metrics and tools to quantify soil health outcomes such that future state programs and policies may reward the ecosystem services being provided by Maryland farmers. The state will need to continue to collect and analyze soil health data evaluation data to improve quantification of soil health outcomes across diverse production systems to demonstrate agronomic and environmental benefits. Funding for the data collection and analysis will need to be identified.

D. Cover Crops

Recognized as one of the most cost-effective practices to mitigate residual nutrient leaching following the harvest of commodity crops, research has shown that the planting of cereal grain cover crops, such as rye, wheat, and barley, not only provide residual nutrient uptake benefits, but also provide winter ground cover to reduce soil erosion and promote healthy soils.

First introduced in the summer of 1997 in response to nutrient leaching concerns, the Maryland Cover Crop Program has evolved significantly over the past three decades. The program is nationally recognized for the significant acres planted annually, as planting the greatest percentage of available acres among all U.S. states. Importantly, the program is re-evaluated each year to ensure payment rates and incentive structures are appropriate. Increasingly, MDA is expanding its cover crop programs to meet all farmer needs.

Cover Crop Plus is a multi-year program to encourage earlier planting, later termination, and multi-year crop rotation planning for soil health along with conservation tillage to maximize co-benefits.

The Small Acreage Cover Crop [Program](#) was created to provide financial assistance to urban and small-scale producers who do not qualify for traditional cover crop programs. Growers that

plant less than ten (10) acres of qualifying cover crops—including cereal grains or cover crop seed mixes—can apply for grants up to \$1,500 per grower, per year.

2024 Milestones

- The traditional cover crop program resulted in a significant 450,000 acres fall planted in the 2023-2024 season, totaling \$30 million in financial assistance;
- *Cover Crop Plus* enrollment through fiscal year 2024 included 16 agreements, and
- The Small Acreage Cover Crop program completed its pilot year in 2024 with 25 projects approved.

Funding

Funding for cover crop programs are annually allocated from the Chesapeake and Atlantic Coastal Bays Trust Fund and the Bay Restoration Fund. To-date, MDA has had sufficient funding to cover the breadth of programs available to cover crop implementation.

Enhancement Opportunities

For the traditional cover crop program, MDA annually convenes a meeting of its key partners - Soil Conservation Districts and academia - to consider enhancements to the programs that 1) make the programs more efficient to administer and/or 2) refine payment incentives based on new research. MDA also works closely with technical partners to use satellite and remote sensing to add additional verification of the spring biomass produced by cover crops. These partnerships have resulted in important, novel science to quantify the outcomes of the program, as well as, financial and administrative savings through remote sensing for field verification.

Outreach to expand participation in the *Cover Crop Plus* and Small Farm Cover Crop programs is ongoing. Additional farmer engagement on the *Cover Crop Plus* program is planned.

Challenges

Much of the state funding dedicated to cover crop implementation is based on nutrient reductions estimated by the Chesapeake Bay Program to achieve the mandated Watershed Implementation Plan (WIP) goals. As such, the nutrient effectiveness for cover crops varies widely based on species, planting method, and planting date. **Translating this effectiveness to also properly credit soil health benefits (i.e. carbon benefits) remains a need for the Chesapeake Bay Program.** MDA will continue to collaborate with the Chesapeake Bay Program and monitor additional research, as it becomes available, to further refine incentive payments to ensure program funding is applied in the most cost effective manner and achieves nutrient reduction, soil health, and climate change goals.

II. Emissions Reductions

Estimates of emissions from the agricultural sector, as included in the state greenhouse gas inventory, represent a small portion of Maryland's cumulative emissions (4%) and rely largely on data provided by the EPA State Inventory Tool (SIT). The state's GHG Reduction Plan estimates the sector's greatest reduction potential comes through improved enteric fermentation and manure management (Figure 1). It is MDA's intention to work with MDE and the ag sector in the coming years to improve the estimate and quantification methods that would draw on more

locally available data and refine the reduction estimates. An updated estimate would be provided in future reports.

Further, MDA plans to initiate partnerships with research and/or higher education institutions in order to better qualify methane (CH₄) outcomes. This will allow for conservation investments in enhanced manure and fertilizer management. Interest in legacy phosphorus and the restoration/upgrade of agricultural ditches and infrastructure along the Eastern Shore are also under discussion. MDA will continue to expand its existing emissions reduction programs and activities, and pledges to work with partners to monitor and quantify reductions at the farm-scale.

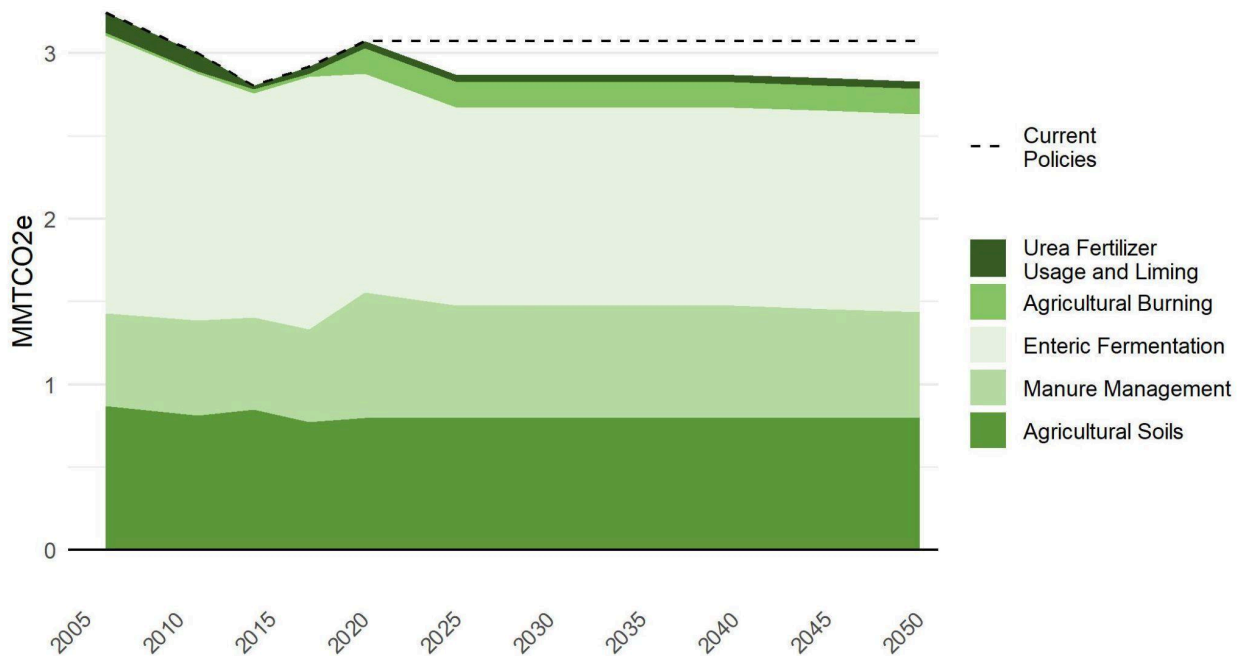


Figure 1: Maryland's agricultural sector GHG emissions trends, historical and projected, from 2006 to 2050 based on current and new policies

A. Animal Waste Technology Fund

The Animal Waste Technology Fund (AWTF) was established in 2013, aiming to provide monetary assistance to individuals, vendors, and businesses showcasing innovative technologies towards managing animal waste. Animal waste is defined as any waste stream generated by on-farm animals or through an animal production process involving Maryland livestock. This includes, but is not limited to, dairy wastewater, carcasses, or poultry processing waste. For projects to be eligible, they must enhance public and environmental health and offer alternative waste management solutions for the agricultural sector. Research and development proposals are not eligible for funding.

The AWTF is a competitive funding grant with a primary goal of protecting our water resources from excess loads of nutrients, while still remaining profitable, and adding value to the traditional farm business model in the state. Many of the projects go hand in hand with the state's climate change goals – many of the awarded technologies also produce a [qualifying](#) renewable energy source that can support the state's goal to achieve 50% renewable energy production by 2030,

as well as, a carbon rich soil amendment by-product that can be land applied to increase soil health and carbon sequestration.

To accomplish the goals of the AWTF, MDA is supported by a multi-partner Technical Evaluation Team (MDA, MDE, DNR, MEA, UM Extension, and USDA) as well as a large Advisory Committee of local, state, and industry partners. In addition, third-party monitoring of AWTF awarded projects provides value insight to the technology performance and environmental outcomes (e.g. Life Cycle Assessment) at the project scale.

2024 Milestones

- MDA continues to partner and benefit from the University of Maryland Extension's commissioned report, *Maryland Animal Waste Technology Assessment and Strategy Planning*, completed in 2023. Additional outreach and community [engagement](#) are underway to increase understanding of technologies, and their environmental and community benefits;
- MDA awarded South Mountain Creamery in Frederick County, a grant of \$505,744 to enhance the farm's manure management system for its 500 dairy cows; and
- Legislation passed ([SB 808](#)) charges MDA to lead a State Anaerobic Digestion (AD) Workgroup to more effectively engage and coordinate the adoption of AD systems in the state. Members of the workgroup were named in 2024 with work proceeding into 2025.

Funding

Annually, the AWTF budgets between \$800,000 to \$1.5 million as available for investment into technologies. Funding is provided by the Chesapeake and Atlantic Coastal Bays Trust Fund. Additional state matching funds can be requested through Maryland Energy Administration programs.

Enhancement Opportunities and Challenges

MDA continues to pursue recommendations from the University of Maryland report, in collaboration with the Advisory Committee, to more fully incorporate climate change and environmental justice metrics that can be integrated into the project selections. Greater emphasis on the climate and community benefits of the program are key to future success.

In the interim, existing projects have provided several lessons learned about the viability and financial feasibility of the technologies at the farm and regional scale. The state would benefit from greater recognition of animal waste technologies to serve as a climate solution for the state and as a source of sustained farm revenue. The newly created AD Workgroup should serve to better align the review and permitting process, catalog the available project incentives, as well as improve collaboration with the utility providers that enter net metering agreements with the property. It will also be critical to leverage Maryland's Animal Waste Technology [Fund](#) to best achieve emission reduction goals and advocate for technology retention within the state's Tier I renewable energy portfolio.

Public and elected officials would also benefit from additional understanding of animal waste technologies. The technology is often novel and can be met with skepticism until additional education is provided. Proactively engaging multiple local governments can be difficult and time consuming, as well as targeted public outreach. MDA is working with partners like the University of Maryland Extension to develop communication materials to support needs.

B. Maryland Resilient Food Systems Infrastructure Grants

MDA serves as co-vice chair of the Maryland Food System Resiliency Council (FSRC) established in 2021. The FSRC aims to address food insecurity while also advancing a vibrant, local food system within the state. Many of the Council's [recommendations](#) recognize the climate and equity benefits of creating a resilient food system. As such, MDA recently secured USDA funding to develop the [MDA Resilient Food System Infrastructure](#) (RFSI) program with a primary aim to build resilience in our food supply chain. RFSI supports increasing access to more and better markets for small farm and food businesses, the development of value-added products, encouraging equal and fair wages and prices, and helping establish new training and employment opportunities. The program will include selection criteria to promote “climate-resilient landscapes” consistent with USDA priorities. The RFSI will complement the Maryland Food and Agricultural Resiliency Mechanism Grant Program (MFARM) goal to help food insecure communities and individuals secure access to necessary food, and provide a market for farmers. This program allows food banks and charitable providers in the state to request funds to purchase products that are listed in the [Certified Local Farm and Fish Program](#) and deliver them to Maryland families.

Milestones

- MDA conducted a survey to identify needs and priorities for the RFSI funding;
- Staff are actively collaborating across units to position MDA programs to address multiple goals for food insecurity, farmer profitability, and build greater resilience into the food system; and
- MDA continues to engage legislators and partners on the recommendations of the FSRC.
- MDA drafted and finalized a State implementation plan for program scopes specific to the State's specific RFSI needs
- MDA facilitated a competitive application process and orchestrated application reviews, submitting final recommendations to USDA for approval (**pending**)

Funding

Funding for RFSI programs is through a \$3.8 million dollar cooperative agreement with the United States Department of Agriculture. Still awaiting USDA final approval, MDA has recommended funding to 25 projects across the State.

Enhancement Opportunities

The RFSI program, viewed as a one time funding opportunity, is viewed as a significant contribution to the expansion and growth of Maryland's capacity for food system resiliency and production. Maryland Department of Agriculture's approved State implementation plan aligned to the 2021 Maryland Climate Adaptation and Resilience [Framework](#) among its goals.

Challenges

Being a national program, the RFSI Program has experienced significant delays in processing and approving final recommendations. What was once projected as Fall 2024, has extended to Winter 2025 for project awards.

III. Environmental Justice

Maryland aims to be a national and global leader in fighting climate change. In order to do so, the state must address issues and concerns that place all communities at risk, equally. [State law defines](#) environmental justice (EJ) as “equal protection from environmental and public health hazards for all people regardless of race, income, culture, and social status.”

MDA is committed to working in collaboration with our state department counterparts, scientists, and our producers to address conditions that disproportionately affect our overburdened and underserved communities. MDA's EJ program and policy is currently in progress, as we work to define key socioeconomic criteria and identify communities and projects.

2024 Milestones

As part of the department's overall aim to provide producers with the support they need and to help build a resilient future for agriculture for all Marylanders, MDA's Resource Conservation unit seeks to

- In mid-2023, MDA Office of Resource Conservation appointed a senior advisor, whose focus is integrating climate change and environmental justice initiatives into the department's existing programs. The advisor will work closely with the Assistant Secretary and program managers to support development and implementation of our conservation programs; and
- Developing producer recognition programs that aim to recognize the value of environmentally engaged farming and holistic community benefits.
- Identify and create applicable tools to scale, in order to achieve MDA equity goals across programming and policy
 - MDE Climate Vulnerability Mapping tool
 - Particularly useful in future planning. For example, we will be able to identify counties and communities that are most vulnerable to incidents of Salt Water Inundation and Sea Level Rise (SWISLR)
 - EPA EJScreen
 - Used in comparison for nationally consistent data sets when looking at environmental and sociodemographic indicators
 - Grocery Gap Atlas by the University of Chicago Open Spatial Lab and the Rural Advancement Foundation International (RAFI)
 - The Atlas allows for visualization of current and historical data, allowing users to understand the impacts of grocery market and food access. As we continue to build out programming addressing equitable and just healthy food access and circular food systems, this tool will be particularly important.
 - Many of the same communities that face food insecurity and lack access are often the same communities that are climate vulnerable.
- Establish advisory committees to reflect demographics and the communities in which they are intended to serve, such as:
 - Urban Agriculture Advisory Committee
 - Soil Health Advisory Committee
 - Anaerobic Digestion Workgroup
 - Animal Waste Technology Fund Advisory Committee

- Nutrient Management Advisory Committee.

Funding

The Small Farm and Urban Agriculture Program is funded by the Chesapeake and Atlantic Coastal Bays Trust Fund. The program currently offers two grant programs to provide financial assistance to producers that qualify. Small Acreage Cover Crops Grants (spring and fall), and Urban Agriculture Water and Power Grants. The Small Farm and Urban Agriculture Program is actively seeking out and pursuing new sources of funding, as interest in education and in the program grows.

Enhancement Opportunities and Challenges

At MDA, we work with our conservation partners at federal, state, and local levels in order to remain a leader in agricultural conservation. It is imperative that we pursue diversity, acceptance, and seek to provide equitable access to our services, programs, and education. As our program begins to take shape and develop, we are working to integrate EJ into our regulatory, education, and technical and financial assistance programs to ensure that small, urban, minority, and underserved communities can benefit from Maryland's healthy natural resources.

Efforts to create and publish comprehensive content and policy surrounding Environmental Justice and Equity in Agriculture are currently underway. This will include both internal materials and public facing content, such as a regularly updated webpage and education on technologies and agricultural practices.