



# Meeting Conservation Challenges Head On

**2020 ANNUAL REPORT**  
Chesapeake Bay Cleanup Progress



**MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS**



# 2020

## A Year Like No Other

### MESSAGE FROM THE PRESIDENT AND EXECUTIVE DIRECTOR



2020 boasted more than its fair share of challenges. Despite the pandemic, Maryland's 24 soil conservation districts kept the essential work that we do for farmers and our state's natural resources on track and moving forward. It wasn't easy, but nothing was easy in 2020. The ability to think on our feet allowed us to meet challenges head on with innovation and ingenuity.

During a year like no other, farmers continued to plant their crops, care for their livestock, and conserve the natural resources that we all depend on. Soil conservation districts followed suit. We continued to deliver services in creative ways following safety protocols and taking advantage of new technologies. Our efforts helped farmers keep dozens of soil and water conservation projects running smoothly and on schedule. Many of the projects completed in 2020 protect local streams from sediment and nutrients coming off the land. This will have a direct impact on the health of the Chesapeake Bay.

Helping farmers conserve natural resources and protect the Bay is a team effort. MASCD is a proud member of Maryland's Conservation Partnership. We work hand in hand with the Maryland Department of Agriculture and the USDA's Natural Resources Conservation Service to provide farmers with skilled conservation professionals and needed financial resources to install best management practices on farms.

But our conservation work is not limited to agriculture. During the pandemic, construction and road building projects proceeded at a record pace. Our urban planners worked with builders, developers, and local planning and zoning officials throughout the year to ensure that safeguards were in place to protect waterways from soil erosion and sediment pollution.

As we look ahead to 2021, we would like to thank the members of the Maryland General Assembly for your support of state funding to hire additional agricultural field staff. These boots on the ground conservation specialists will work directly with farmers to plan, design, and install additional best management practices to reduce agriculture's environmental footprint and meet the Bay's clean water goals.

We also thank our soil conservation districts for the warm welcome you extended to Jen Nelson, our new Executive Director and for embracing additional staff changes that will ensure the continued success of our organization.

Please read on to learn how MASCD and soil conservation districts are meeting conservation challenges head on. We are grateful to our conservation partners—especially our farmers—for your commitment and dedication to protecting and preserving our vital natural resources. We cannot succeed without your support.

**Bruce Yerkes**, *President*

**Jen Nelson**, *Executive Director*

Maryland Association of Soil Conservation Districts



### MISSION STATEMENT

*The Maryland Association of Soil Conservation Districts (MASCD) serves as the voice for Maryland's 24 soil conservation districts on statewide issues. Our mission is to promote practical and effective soil, water, and related natural resource programs to all citizens on a voluntary basis through leadership, education, cooperation, and local direction provided by soil conservation districts.*

# THE YEAR IN PICTURES

# 2020



### TOMMY BRISCOE HONORED

Tommy Briscoe of Calvert County was awarded MASCD's Outstanding Leadership Award for his many years of service as a supervisor and leadership in developing conservation programs.



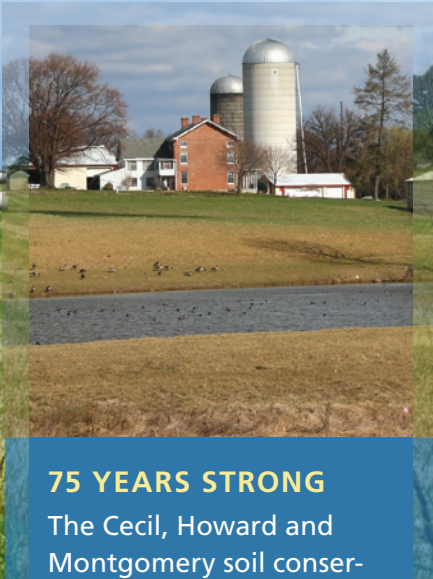
### FARMERS SAY YES! TO COVER CROPS

Maryland farmers planted more than 420,000 acres of protective cover crops in their fields last fall defying heavy rains and poor field conditions.



### GRANT MILESTONE REACHED

The Dorchester, St. Mary's and Talbot soil conservation districts have collectively secured more than \$400,000 in technical assistance grants from the National Association of Conservation Districts since 2018.



### 75 YEARS STRONG

The Cecil, Howard and Montgomery soil conservation districts celebrated 75 years of helping land-owners care for the natural resources on their farms.



### FARM AND HARVEST RETURNS FOR SEASON 8

Maryland Public Television's popular original series, "Maryland Farm & Harvest" returned for its eighth season. The show takes viewers around the state to see and experience what it's like to run a 21st century farm. Watch online at [mpt.org/farm](http://mpt.org/farm)





# Meeting the Bay Challenge



Soil conservation districts help farmers install best management practices (BMPs) on their farms that meet clean water goals for the Chesapeake Bay and its tributaries. Initiated by the U.S. Environmental Agency (EPA) in 2010, the Bay cleanup is a watershed-wide effort that requires the six Bay states and the District of Columbia to reduce pollution from a variety of sources and restore clean water in streams, rivers, and the Chesapeake Bay by 2025.

Maryland agriculture has made tremendous strides in protecting the Bay and its tributaries from sediment and nutrient runoff. BMPs installed on farms with public funds are reported to EPA using the Maryland Department of Agriculture's Conservation Tracker database management system. Soil conservation districts work with farmers to verify practices installed with private funds so that they can be accounted for as well.

## MEETING THE CHALLENGE

### On the Farm

Soil conservation and water quality plans—sometimes called **farm plans**—are one of the most important tools in a farmer's conservation toolbox. Developed by technical staff working in the local soil conservation district, these plans identify a farm's important natural resources, pinpoint problem areas, and set realistic goals and timelines for making improvements.

Because each farm is unique, with its own set of challenges, no two farm plans are alike. A livestock crossing or fencing may be recommended to help a beef cattle operation keep animals away from streams. Cover crops and stream-side buffers are often recommended to prevent nutrient runoff from crop fields. Other more costly BMPs, such as heavy use areas or waste storage facilities, help poultry and livestock operations protect water quality and comply with environmental regulations. Each BMP must be custom planned, designed and installed for a specific site. The entire process often involves a team of conservation professionals.

To ensure their effectiveness, farm plans must be updated periodically to account for operational changes. Farm plans are required by many federal and state programs and are included in Maryland's Bay cleanup progress. In 2020, Maryland's 24 soil conservation districts developed or updated 863 Soil Conservation and Water Quality Plans to help farmers protect 114,356 acres of land.

Farm plans include a menu of BMPs that can be installed on working farms to control soil erosion, manage animal manure, protect water quality, and enhance wildlife habitat. District staff help farmers select the right BMP for their farms, supervise their installation or construction and develop maintenance plans to keep them in good working order. In 2020, soil conservation districts helped 753 farmers install 1,893 BMPs on their farms to protect natural resources.

CHESAPEAKE BAY RESTORATION				
PROGRESS THROUGH JULY 2020				
BEST MANAGEMENT PRACTICE	2025 GOAL	2020-2021 MILESTONE TARGET	2020 PROGRESS	MILESTONE PERCENTAGE
Cover Crops	478,391 acres	478,391 acres	488,214 acres	102%
Manure Transported (Alternative Use or Out of Watershed)	97,366 tons	97,366 tons	62,163 tons	64%
Exclusion Fencing (acres of buffers)	1,867 acres	1,262 acres	1,037 acres	82%
Grass Buffers	43,706 acres	34,587 acres	30,075 acres	87%
Off-Stream Watering Without Fencing	2,730 acres	12,730 acres	39,365 acres	309%
Retirement of Highly Erodible Land	33,171 acres	27,355 acres	24,939 acres	91%
Soil Conservation and Water Quality Plans (acres managed under a plan)	1,054,607 acres	1,054,607 acres	861,876 acres	82%
Streamside Forest Buffers	20,274 acres	17,818 acres	16,722 acres	94%
Waste Storage Structures Livestock	99,654 animal units*	84,105 animal units	73,236 animal units	87%
Waste Storage Structures Poultry	1,798,116 animal units	1,629,748 animal units	1,730,307 animal units	106%
Wetland Restoration	13,620 acres	10,172 acres	8,675 acres	85%

\*One animal unit = 1,000 lbs. of live animal weight

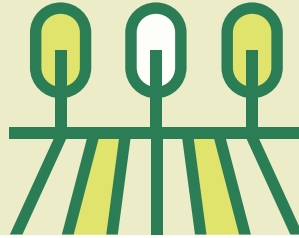
# By the Numbers

In 2020, Maryland's soil conservation districts helped farmers install conservation practices on the land to protect water quality in the streams and rivers that feed the Chesapeake Bay.

## 863

### SOIL CONSERVATION & WATER QUALITY PLANS

Developed or updated 863 soil conservation and water quality plans to protect 114,356 acres of land in every Maryland county.



## 1,893

### BEST MANAGEMENT PRACTICES

Managed the construction or installation of 1,893 best management practices to help 753 farmers control soil erosion, manage nutrients and protect water quality in the streams and rivers that flow to the Bay.



## \$46.7 Million

### GRANTS AND FINANCIAL ASSISTANCE

Secured roughly \$46.7 million in financial assistance from state and federal agencies to help farmers install best management practices on their farms.



## WINDERS AWARDED 2020 COOPERATOR OF THE YEAR

Kirk and Kirklyn Winders of Winders Dairy in Washington County are MASCD's 2020 Cooperators of the Year. The Winders operate a 130-head dairy and heifer operation and grow corn, soybeans, alfalfa, and barley on 300 acres of land that they own and another 80 acres of land that they rent. They have deep roots in the community dating back to the 1700s.

The Winders use Soil Conservation and Water Quality Plans to protect natural resources and are in full compliance with the state's nutrient management requirements. In the fall, they plant cover crops to control erosion and protect local waterways from runoff.

In 2016, the Winders installed 2.36 acres of forest buffers and .3 acres of grass buffers along Little Antietam Creek to prevent pollutants from entering the water. They also fenced their livestock out of the creek and provided their animals with alternative water facilities.

In 2017, the Winders installed a Best Available Technology (BAT) septic system on the heifer farm to further protect local streams from bacterial and nitrogen pollution.

More recently, the Winders completed a loafing lot management project to reduce mud, manure, and erosion. The barnyard area was completely transformed and now includes a roofed feeding area, two manure storage facilities, three roof runoff structures, heavy use area protection, a grassed waterway and an additional 1.4 acres of forested stream buffer.

The combined projects are expected to prevent an estimated 1,025 pounds of nitrogen, 22 pounds of phosphorus, and 5,491 pounds of sediment from entering local streams each year.

MASCD is proud to honor the Winders family as its 2020 Cooperator of the Year.







**MEETING THE CHALLENGE**

# Reducing Runoff in Urban Areas

## Erosion and Sediment Control Plan Reviews

Soil erosion is not limited to farmland. Clearing the land, improving roads, and building new homes and shopping centers increases the risk of sediment and nutrient pollution entering our waterways. Since 1972, soil conservation districts have been authorized to review and approve erosion and sediment control plans for construction projects in their counties. Their work ensures that environmental safeguards are in place to minimize soil erosion and nutrient runoff. In 2020, soil conservation districts reviewed 6,482 erosion and sediment control plans for construction projects on 29,217 acres. Just over 79 percent of these plans were approved.

## Urban Compliance Activities

Soil conservation districts in Allegany, Calvert, Caroline, Cecil, Frederick, St. Mary's, and Washington counties have the added responsibility of performing compliance activities for the Maryland Department of the Environment's Sediment, Stormwater and Dam Safety Program. This local authority provides developers with easy access to enforcement officials and results in faster project turnaround times. In 2020, participating districts performed 326 pre-construction meetings and 604 inspections to ensure that erosion and sediment control measures are working to protect water quality.



*A stormwater management structure catches and treats parking lot runoff at the new Leonardtown Library in St. Mary's County.*

**MEETING THE CHALLENGE**

# Financing Conservation Projects

Even in the best of times, many farmers cannot afford to install best management practices on their farms without financial help. Soil conservation districts help farmers sort through the maze of local, state, and federal financial assistance programs that can help them protect natural resources and comply with environmental regulations. District staff help farmers calculate costs to install BMPs, apply for state and federal financial assistance, and leverage funding for maximum support. In 2020, districts helped farmers secure approximately 46.7 million in conservation assistance.

## MARYLAND DEPARTMENT OF AGRICULTURE

### Cover Crop Program:

**\$26.6 MILLION—488,214 ACRES**

Provided 1,469 farmers with cost-share grants to help offset seed, labor and equipment costs associated with planting cover crops.

### Capital Program/Special Project Grants: \$4.4 MILLION

Provided 250 farmers with cost-share grants to install a variety of BMPs on farms to protect natural resources.

### Manure Transport Grants:

**\$1.4 MILLION—309,374 TONS OF MANURE TRANSPORTED**

Provided cost-share grants to truck manure away from areas with high soil phosphorus levels. Poultry companies provided an additional \$455,681 in matching funds to transport poultry litter.

### Manure Injection Grants: \$369,056

Provided 51 farmers with grants to help offset costs to inject manure below the soil surface.

### Conservation Reserve Enhancement Program: \$174,038

Provided farmers with grants to install 30 projects to protect environmentally sensitive lands next to streams.

## USDA NATURAL RESOURCES CONSERVATION SERVICE\*

### Environmental Quality

**Incentives Program (EQIP):**

**\$9.9 MILLION—12,075 ACRES**

Provided financial and technical assistance to help 266 landowners address natural resource concerns.

### Regional Conservation

**Partnership Program:**

**\$1.3 MILLION—2,152 ACRES**

Provided financial and technical assistance to 16 farmers participating in partner-driven conservation projects.

### Conservation Stewardship Program:

**\$1.1 MILLION—13,378 ACRES**

Helped 24 farmers maintain and improve existing conservation systems and adopt additional conservation practices to address priority resource concerns.

### Agricultural Management

**Assistance Program:**

**\$ .9 MILLION—643 ACRES**

Provided financial and technical assistance to help 58 farmers improve water quality.

### Agricultural Conservation Easement

**Program: \$ .6 MILLION—69 ACRES**

Provided financial and technical assistance to help 2 farmers protect and enhance wetlands.

*\*USDA-NRCS data estimates are preliminary and subject to change.*

## MEETING THE CHALLENGE

# Education and Outreach

Maryland's soil conservation districts educate farmers, students, teachers, citizens, and elected officials on the importance of clean water, productive soil, and healthy food systems. In 2020, COVID-19 safety concerns compelled districts to reach out to these audiences in new and creative ways:

- Workshops, pasture walks and student field trips went virtual. Many events were recorded and posted online for viewers to watch at their convenience.
- The Cecil SCD hosted a no-contact Conservation Ag Tour for community members. Visitors toured a conservation farm in the safety of their own vehicles and got to see BMPs at work protecting natural resources. A virtual tour guide described what visitors were seeing and answered questions, making the experience highly personal.
- The Montgomery SCD created virtual lessons and learning packets for fourth grade students participating in the county's award-winning *Close Encounters with Agriculture* program.
- In January—just before COVID-19 safety restrictions kicked in—the Harford SCD partnered with Harford Community College and local farm groups to host a *Food, Farmers and Community Symposium*. The group moved the event online for 2021.
- The Garrett SCD added a rainfall simulator to its education program. It provides a striking visual demonstration of the relationship between rainfall, tillage methods and various types of groundcover. The simulator can be used outside to accommodate COVID-19 safety protocols.

“

During the year, we expanded our social media presence on Facebook and Twitter. This resulted in a tremendous increase in requests for conservation information and technical assistance from rural landowners.”

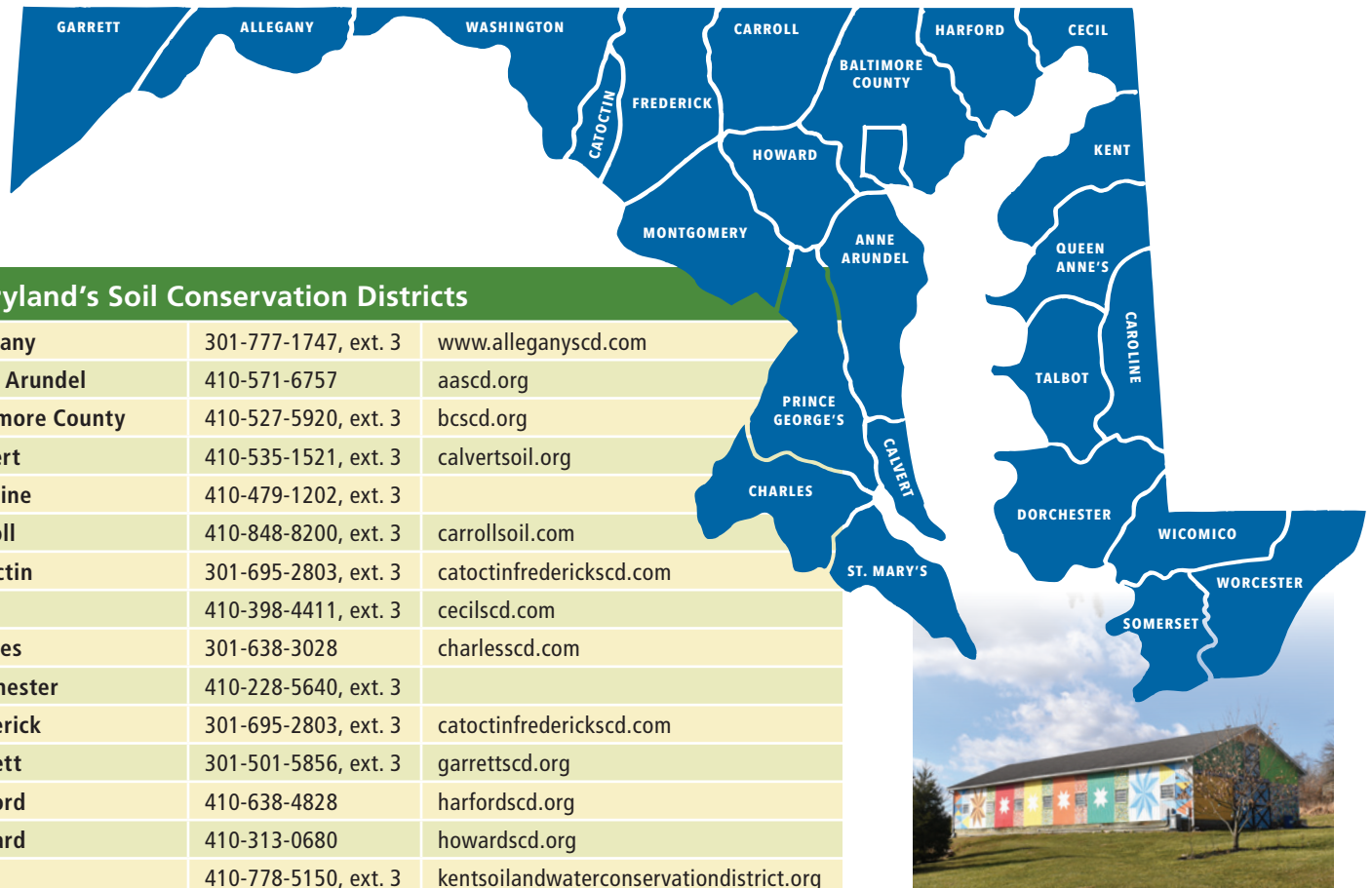
—John Zawitoski  
District Manager  
Montgomery Soil  
Conservation District



## SPECIAL PROJECT GRANTS

Special project grants secured by MASCD during the year provide farmers with needed engineering services and continued support for its long-standing farmer recognition and certification program.

PROJECT NAME:	<b>Enhancing Conservation Delivery Capacity</b>
FUNDING SOURCE:	<b>The Campbell Foundation</b>
AMOUNT:	<b>\$32,500</b>
DESCRIPTION:	This grant will be used to help districts improve policies and procedures, strategic planning efforts and education and advocacy.
PROJECT NAME:	<b>Farm Stewardship Certification and Assessment Program</b>
FUNDING SOURCE:	<b>The Campbell Foundation</b>
AMOUNT:	<b>\$40,000</b>
DESCRIPTION:	This grant provides continued support for MASCD's Farm Stewardship Certification and Assessment Program (FSCAP). Established in 2010, FSCAP recognizes farmers who are good stewards of their natural resources and encourages and rewards farmers to put more BMPs on their land. To date, 156 farmers have been certified.
PROJECT NAME:	<b>Increasing Consistent Training for Soil Conservation Districts</b>
FUNDING SOURCE:	<b>National Fish and Wildlife Foundation's Chesapeake Bay Stewardship Fund</b>
AMOUNT:	<b>\$45,296</b>
DESCRIPTION:	This grant aims to increase the planning, design, and technical assistance capacity of Maryland's soil conservation districts. It supports a new series of virtual training events for conservation planners and technicians who provide services in both agricultural and urban landscapes.



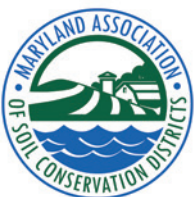
## Maryland's Soil Conservation Districts

Allegany	301-777-1747, ext. 3	www.alleganyscd.com
Anne Arundel	410-571-6757	aascd.org
Baltimore County	410-527-5920, ext. 3	bcsd.org
Calvert	410-535-1521, ext. 3	calvertsoil.org
Caroline	410-479-1202, ext. 3	
Carroll	410-848-8200, ext. 3	carrollsoil.com
Catoctin	301-695-2803, ext. 3	catocctinfredericksd.com
Cecil	410-398-4411, ext. 3	cecilsd.com
Charles	301-638-3028	charlesscd.com
Dorchester	410-228-5640, ext. 3	
Frederick	301-695-2803, ext. 3	catocctinfredericksd.com
Garrett	301-501-5856, ext. 3	garrettscd.org
Harford	410-638-4828	harfordscd.org
Howard	410-313-0680	howardscd.org
Kent	410-778-5150, ext. 3	kentsoilandwaterconservationdistrict.org
Montgomery	301-590-2855	montgomeryscd.org
Prince George's	301-574-5162, ext. 3	pgscd.org
Queen Anne's	410-758-3136, ext. 3	qascd.com
St. Mary's	301-475-8402, ext. 3	stmarysscd.com
Somerset	410-621-9310	
Talbot	410-822-1577, ext. 5	talbotscd.com
Washington County	301-797-6821, ext. 3	conservationplace.com
Wicomico	410-546-4777, ext. 3	
Worcester	410-632-5439, ext. 3	

### MARYLAND'S CONSERVATION PARTNERSHIP

Soil conservation districts are members of Maryland's Conservation Partnership, a coalition of federal, state, and local agriculture agencies dedicated to protecting and conserving natural resources and promoting Maryland agriculture.

- Maryland Association of Soil Conservation Districts
- Maryland Department of Agriculture
- USDA Natural Resources Conservation Service
- USDA Farm Service Agency
- State Soil Conservation Committee
- University of Maryland Extension



#### MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS

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 303-353-9733



### ABOUT SOIL CONSERVATION DISTRICTS

Long before the term environmentalist was coined, Maryland's soil conservation districts were working with landowners to protect natural resources on their farms. Established more than 75 years ago following the ecological disaster brought on by the Dust Bowl, districts perform a range of conservation activities aimed at keeping the soil healthy and our waterways clear and clean.

Here in Maryland, more than 120 volunteers serve in appointed positions on the governing boards of soil conservation districts. They work directly with thousands of cooperating land managers across the state, and their efforts impact almost two million acres of private land. The staff of a typical soil conservation district office includes a district manager, district conservationist, engineers, agricultural planners, technicians, soil scientist, urban reviewers, and administrative staff. Staff and operating budgets are funded through a combination of federal, state, and local sources as well as grants.

Soil conservation districts carry out many federal and state mandates at the local level and serve as the agricultural representative on local, regional, and statewide environmental task forces and committees charged with protecting natural resources and the Chesapeake Bay.