



ENVIRONMENTAL STEWARDSHIP DIVISION

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TABLE OF CONTENTS

03	Letter from the Director
04	Business Unit
06	Conservation District Operations
08	Farmland Conservation Easements
10	Farmland Preservation
12	Forestry Assistance
14	Intercounty Drain Program
16	Michigan Agriculture Environmental Assurance Program (MAEAP) Overview
18	MAEAP Conservation Technical Assistance Initiative
20	MAEAP Clean Sweep
22	MAEAP Education for Farmers and Technicians
24	MAEAP Pesticide Container Recycling
26	MAEAP Water Use Reporting
28	MAEAP Aquifer Dispute Resolution
30	MDARD Spill Response
32	Migrant Labor Housing
34	Migrant Labor Housing: H-2A Guest Worker Housing
36	Qualified Forest Program
38	Right to Farm Complaint Response
40	Right to Farm GAAMPS Revision
42	Right to Farm Proactive Review
44	Right to Farm Biosolids



LETTER FROM THE DIRECTOR

The Michigan Department of Agriculture and Rural Development's (MDARD) Environmental Stewardship Division (ESD) works with resource managers to implement sound environmental practices that provide for a safe and healthy environment, a viable natural resource base, and a strong agricultural and forestry economy. This is important and hard work. The tremendous ESD staff works with many stakeholders across the state to accomplish this goal.

Despite continued challenges with the COVID-19 pandemic, this was a busy season for all ESD programs. This year's annual report gives a snapshot of the division's outstanding accomplishments. The Migrant Labor Housing program completed more than 3,000 license inspections of migrant housing, which provided safe and wholesome living conditions for more than 28,000 migrant workers and their families.

The Clean Sweep Program properly disposed of more than 220,000 pounds of unwanted, unusable pesticides. The engineering partnership program with the United States Department of Agriculture (USDA) Natural Resources Conservation Service completed 1,089 engineered practice designs worth \$11.4 million in federal cost-share. The Michigan Agriculture Environmental Assurance Program reached more than 6,100 verifications in 2021. The Intercounty Drain Program continued work on the Oakland-Macomb Interceptor that serves more than 830,000 residents in these two counties. The Qualified Forest Program enrolled 69,000 acres of privately held forest land. The Farmland Preservation Program processed over 3,500 land preservation transactions and added a net of 21,000 acres to the 3.4 million acres of farmland in the program. And finally, we continue to work with Michigan's 75 conservation districts. They did a great job in moving the work forward at a time when COVID-19 challenges, meeting arrangements, and addressing social distancing were a challenge.

I am proud to present the 2021 ESD Annual Report. It reflects the creativity, flexibility, and industry that are an integral characteristic of ESD staff and our partners. I consider myself fortunate to be associated with ESD's hard-working team and all they do to protect consumers, the environment, and promote the long-term sustainability of Michigan agriculture and privately owned forests.

Jim Johnson
Division Director
Environmental Stewardship Division



Business Unit

PROGRAM MANAGER: Vacant (James Johnson - interim) | 517-284-5602 | JohnsonJ9@michigan.gov

The Business Unit provides centralized office services within the Environmental Stewardship Division (ESD). Office services include budget development and monitoring, grant management, payment processing, procurement, performance measurement scorecards, equipment and technology support, timekeeping, office supplies, travel, coordination of Freedom of Information Act requests, and record retention. The centralized services allow program staff to focus on program implementation and process improvement.

IMPACT FOR MICHIGAN:

Before the creation of the Business Unit, operational tasks were distributed between three staff and four managers, all using different procedures and processes with operational redundancy. The Business Unit has standardized ESD procedures, increasing quantity, quality, and timeliness within the division. The Business Unit also provides for continuity of operations through cross-training of staff on essential functions.

2021 ACCOMPLISHMENTS:

- Continued to refine and improve remote working capabilities for entire ESD staff due to continued COVID-19 pandemic protocols.
- Provided financial data and reports to program management within the division for strategic planning.
- Successfully originated and administered 133 grants in 19 different categories.
- Provided adequate personal protective equipment (PPE) gear to staff to continue performing their duties safely.
- Integrated the Michigan Department of Agriculture and Rural Development’s (MDARD) Diversity, Equity, and Inclusion Task Force video into the ESD New Employee Orientation Program.
- Implemented virtual desktop infrastructure technology for the Farmland program. It created time efficiency and rapid remote access to the database.

Metric	2019	2020	2021
Grants			
Specific types	17	14	19
Originated and processed	119	133	133
Payments processed	516	541	554
Spending Plan			
Appropriation line items	7	9	8
Funds managed – federal	4	3	3
Funds managed – state restricted	5	5	5
Staff Supported	66	66	64
Portion of Budget charged to GF	34.5%	25.9%	37.1%
Office Management			
Computers Refreshed	4	12	25
Smart phone updates	35	30	8

2022 PROGRAM GOALS:

- Continue information management upgrades.
- Develop efficiency gains with the new SIGMA Enterprise software.
- Continue to refine electronic and remote working capabilities.
- Continue to provide adequate PPE gear to staff.
- Increase cross-training for bench strength.
- Continue professional growth for staff.
- Implementation of Simplifile process for Farmland and Right to Farm programs.
- Processing of Conservation Reserve Enhancement Program cost-share.
- Begin administering \$25 million in best management practices for Western Lake Erie Basin.



KEY STAKEHOLDERS

- ESD program managers and staff
- MDARD Budget Office
- Accounting Services Division
- Conservation Districts
- Other state agencies
- Federal government

LEGAL AUTHORITY:

- Omnibus Budget Appropriations Bill, Public Act 166 of 2020



Conservation District Operations

PROGRAM MANAGER: John Switzer | 517-881-5172 | SwitzerJ3@michigan.gov

Michigan's conservation districts are local units of government that utilize local, state, federal, and private sector resources to deliver conservation programming designed to solve today's agricultural and natural resource problems. Michigan Department of Agriculture and Rural Development's (MDARD) Conservation Programs staff work to empower conservation districts to sustain, protect, and enhance Michigan's natural resources so they can be recognized as a trusted resource for local conservation solutions supported by stable funding and a network of collaborative partners. Conservation districts are also the primary mechanism by which MDARD conservation programs are delivered to private landowners.

IMPACT FOR MICHIGAN:

Michigan's agriculture and forest products industry is a \$104.7 billion sector of the state's economy. The sustainable use of our soil, water, and forest resources is critical to ensuring the future of our agriculture and forest products industry. Conservation programming is most effective when delivered at the local level, by local people, with local technical assistance. MDARD relies on conservation districts to provide local delivery of the following programs that help protect and conserve Michigan's natural resources:

- Michigan Agriculture Environmental Assurance Program
- Forestry Assistance Program
- Conservation Technical Assistance Initiative
- Michigan Produce Safety Program

2021 ACCOMPLISHMENTS:

- Re-establishment of base operations funding for all 75 conservation districts.
- Implicit bias training was provided for and taken by 165 directors and staff.
- Statewide implementation of a new operations review and grant progress review process.
- Development of tools and resources to support Conservation District operational capacity.
- 156 instances of operational development assistance to conservation districts.
- Assistance with 44 conservation district employee search and selection events.
- Grant program delivery support to 55 conservation districts that collectively received more than \$6.6 million in grant funding for the delivery of MDARD programs.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Number of conservation districts	75	75	75	75	75
Number of district managers	69	70	70	70	70
Total district staff	199	282	241	282	284
Number of districts receiving ESD grants	62	57	52	55	55
Total number of ESD grants to districts	135	127	94	100	98
Value of ESD grants to districts	\$6.2M	\$6.65M	\$8.08M	\$6.9M	\$6.69M
ESD grant program progress reviews	692*	383	501	417	224
Conservation district board meetings attended	127	163	152	183	172
Conservation district employee search and selection assistance	35	40	27	24	44
Conservation district capacity building assistance	135	52	79	193	156
District employee development assistance	51	36	20	49	35

*Includes financial evaluations from the last quarter of fiscal year 2017 typically counted towards the following fiscal year.

2022 PROGRAM GOALS:

- Assist with the successful implementation of operations grants to conservation districts.
- Provide support to all districts to ensure successful completion of local conservation needs assessments.
- Continue to pursue the development of a formal Michigan Conservation Partnership.
- Strengthen collaboration within the division and department to better meet grantees' needs.
- Finalize a training plan and development of additional training for conservation district directors and staff.
- Continued implementation of Conservation Programs Unit's five-year strategic plan for working with conservation districts.
- Further develop and implement the operations review process to help conservation districts build operational capacity and enhance grant delivery.
- Continue to provide support to help conservation districts through the COVID-19 pandemic.



KEY STAKEHOLDERS

- Conservation district directors and staff
- Michigan landowners
- Federal and state partnering agencies
- Users of Michigan's natural resources

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 93 (Soil Conservation Districts), as amended



Farmland Conservation Easements

PROGRAM MANAGER: Chip Kraus | 517-294-2298 | KrausF@michigan.gov
Program Coordinator - Beth Brost | 517-243-7949 | BrostE@michigan.gov

A conservation easement is a voluntary agreement between a landowner and the State of Michigan that keeps land available for agricultural or open space uses. It protects the quality of farmland, the natural condition of the land, and the land remains in private ownership. The Michigan Agricultural Preservation Fund provides grants to qualified local farmland preservation programs to close on conservation easements. The State of Michigan also accepts conservation easement donations, which are considered charitable donations and may provide a federal income tax deduction.

IMPACT FOR MICHIGAN:

The availability of permanent conservation easements on agricultural land and open space provides a focal point for local land use planning, zoning, and associated farmland preservation efforts. Agricultural and open space lands are an integral part of the state's economy. More than 26,000 acres of land in conservation easements contributed to the estimated \$104.7 billion of Michigan's total food and agriculture economy.

2021 ACCOMPLISHMENTS:

- The Conservation Easement Donation Program closed on a new conservation easement, covering 127 acres.
- The Michigan Agricultural Preservation Fund held an application cycle, with \$2 million available to local farmland preservation programs. Seven grants were awarded to local farmland preservation programs; preserving 730 acres.
- Another application cycle with \$2 million available was held in October 2021 for the fiscal year 2022. Twenty-four qualified local farmland programs can submit applications that will be scored and awarded by March 2022.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
New Conservation Easements					
Conservation easements recorded	2	8	5	4	3
Acreage enrolled	276	480	668	289	514
Program Total Conservation Easements					
Conservation easements recorded	133	141	146	150	153
Local conservation easements	11	11	11	12	14
Acreage enrolled	25,038	25,518	26,186	26,475	26,989
Easement Monitoring					
Donated development rights	53	61	66	69	70
State purchase of development rights	50	50	50	50	50
USDA farm and ranch land	21	21	21	21	21
Total	124	132	137	140	141

2022 PROGRAM GOALS:

- Work with the agriculture community, federal Agricultural Conservation Easement Program, township, and county farmland preservation programs to award state grants for farmland conservation easements.
- Collaborate with American Farmland Trust, state land conservancies, townships, and counties to help local farmland preservation programs become qualified for the Michigan Agricultural Preservation Fund.



KEY STAKEHOLDERS:

- Michigan farmers
- Local farmland preservation programs
- Consumers of Michigan grown food
- Those who enjoy the open space and farmland

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, MCL 324.36101 *et seq.*
- Conservation and Historic Preservation Easement Act, Sub Part 11 of Part 21 of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, MCL 324.2140 *et seq.*
- Public Act 451 of 1994, as amended, MCL 324.36201 *et seq.*



Farmland Preservation

PROGRAM MANAGER: Chip Kraus | 517-294-2298 | KrausF@michigan.gov

The Farmland and Open Space Preservation Program or Public Act 116 (PA 116) preserves farmland from being developed for non-agricultural uses. Participating landowners may be entitled to receive a Michigan income tax credit for property tax above 3.5 percent of total household income and exempt from some special assessments. Currently, there are approximately 3.1 million acres of farmland enrolled in PA 116.

IMPACT FOR MICHIGAN:

PA 116 was established in 1975 in response to the loss of farmland associated with high property taxes. Michigan is one of the few states in the nation with market-based property tax assessments. Agricultural lands near developing urban areas were being taxed based on what their land would sell for if converted into housing developments or strip malls. As a result, Michigan was losing cropland at an average rate of six percent per year. Michigan's food and agriculture sector contributes \$104.7 billion to the state's economy.

2021 ACCOMPLISHMENTS:

- Updated request forms to comply with the Americans with Disabilities Act in preparation for website upgrades.
- Completed 11 farmland development rights solar panel agreements, which permit the construction and operation of five solar energy generating facilities on PA 116 enrolled property. It ensures the property will continue to be preserved for agricultural use. Construction began on three of the approved solar projects in 2021.
- Developed incoming mail scanning process to improve the efficiency of mail processing while working remotely. The new process is projected to save 600 hours of staff time annually.
- The Farmland database was updated with improvements. Farmland staff completed 26,645 individual actions within the database and closed out 5,056 agreement modification requests.
- Successfully managed 18,283 customer phone calls, 4,523 customer emails, and 292 faxes.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Agreement Request Processing					
Applications	569	500	721	529	493
Transfers	1,674	3,219	1,707	824	920
Extensions	2,294	2,705	1,666	482	1,750
Expirations	712	1,630	961	648	790
Splits	531	393	264	165	234
Other	679	878	797	525	816
New or modified agreements recorded	7,644	9,573	5,937	3,131	3,072
Program Participation					
New acreage enrolled	45,520	40,000	42,340	30,963	26,113
Acres expired/released	33,112	45,252	22,172	7,696	31,900
Tax credits issued (\$ millions)	51	53	60	57	67
Acreage enrolled (millions)	3.25*	3.24*	3.26*	3.28*	3.10
<i>*Estimate reported includes expired agreements</i>					

2022 PROGRAM GOALS:

- Improve program metrics and workload balance to reduce program backlogs while maintaining a high level of customer service. Continue towards the goal of processing new requests within 60 days.
- Continue updating the geographic information system PA 116 parcel data for any additional counties that have been mapped.
- Continue working with the Michigan Department of Treasury on process improvements for the program.
- Continue updating program processes, forms, guidance documents, and web pages to improve efficiency and provide additional clarity.



KEY STAKEHOLDERS:

- Michigan farmers
- Agribusinesses
- Consumers of Michigan grown food
- Rural and urban residents who enjoy the open space provided by active farmland

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 361 (Farmland and Open Space Preservation), as amended



Forestry Assistance

PROGRAM MANAGER: John Switzer | 517-881-5172 | SwitzerJ3@michigan.gov

The Forestry Assistance Program (FAP) is designed to support family forest owners in realizing the economic, social, and ecological sustainability of their forests. Conservation district foresters help family forest owners understand the value of actively managed forest resources. They also refer landowners to private sector professionals for management plan development, forest management, timber valuation, and harvests.

IMPACT FOR MICHIGAN:

Nearly 50 percent of Michigan's 19 million acres of forestland is owned by non-industrial private forestland owners (family forest owners). Family forest owners contribute 64 percent of Michigan's timber supply. The forest products industry contributes more than \$20 billion to the state's economy annually with the potential to contribute much more. Only one-third of the growth of timber on private forestlands is currently being harvested.

2021 ACCOMPLISHMENTS:

- Conducted 2,143 landowner site visits.
- Referred \$10.5 million in forest management projects for private landowners.
- Completed 60 risk assessments for the Michigan Agriculture Environmental Assurance Program's Forest, Wetlands, and Habitat system.
- Completed 65 American Tree Farm inspections.
- Delivered 210 outreach events targeted to family forest owners, foresters, and loggers.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020	2021
Outreach events	337	407	368	398	190	210
On-site visits to family forest owners	2,202	2,037	2,007	2,098	2,021	2,143
Service referrals to the private sector	735	864	1,070	1,129	1,107	1,101
Service referrals to the public sector	649	663	907	797	1,999	1,064
Service referrals for timber harvest	295	335	413	426	360	385
Estimated value of referrals (\$M)	9.8	10.1	9.7	11.9	13.4	10.5
Acres referred to Qualified Forest	80,851	77,224	55,409	167,883	71,381	69,034

2022 PROGRAM GOALS:

- Increase awareness and enrollment in Michigan’s Qualified Forest Program.
- Implement actions identified in the 10-year master plan.
- Implement “Climate Action and Reforestation in Northern Michigan” Regional Conservation Partnership Program project.
- Conduct 2,000 on-site visits to forest properties.
- Conduct 2,000 referrals to the public and private sectors.



KEY STAKEHOLDERS

- Family forest owners
- Private sector professional foresters
- Michigan’s forest products industry
- Local units of government
- Conservation districts
- Forestry, wildlife, and conservation advocacy groups

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 93 (Soil Conservation Districts), as amended



Intercounty Drain Program

PROGRAM MANAGER: Michael R. Gregg | 517-331-3661 | GreggM@michigan.gov

There are more than 1,000 intercounty drainage systems in Michigan with an estimated combined length of more than 6,000 miles, serving approximately six million acres. Each of these drainage systems is governed by a drainage board that administers the proceedings to establish, improve, and maintain storm drains and sanitary sewers serving two or more counties under the Michigan Drain Code. The Michigan Department of Agriculture and Rural Development (MDARD) serves as chair for each of these boards.

IMPACT FOR MICHIGAN:

County and intercounty drains are the prerequisite infrastructure for Michigan's economic development. They have played a key role in the development of agriculture, roads, and highways, residential, and commercial properties by removing excess soil moisture, reducing flood impacts, and improving public health. Michigan has more than 35,000 miles of legally established "public" drains serving more than 17 million acres of agricultural and urban lands and roadways.

2021 ACCOMPLISHMENTS:

- Staff conducted more than 300 virtual drainage board meetings, which serviced more than 150 intercounty drains.
- Substantial work was completed to rebuild eight miles of dikes and a dam on the Misteguay Creek. Completion is set for June of 2022.
- Work started on seven miles of the North Interceptor East Arm in the City of Detroit that serves as the outlet for the Oakland-Macomb Interceptor. This system transports raw sewage from 23 communities in southeast Michigan. Construction is expected to be completed in 2024.
- The \$44 million Milk River Retention Treatment Basin is expected to be completed in June of 2022 including the rehabilitation of seven 1,750 hp stormwater pumps to prevent basement and road flooding in parts of southeast Michigan.
- The new program secretary was successfully onboarded and trained.
- Substantial completion was reached on the Waldo Intercounty Drain (Bay & Midland Co's.). It incorporated more than eight miles of a two-stage channel, the longest single application of this technique in the state to date. This allows multiple benefits including flood storage, improved water quality, and reduced maintenance. The \$5.4 million dollar project also replaced 123 crossings.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020	2021
Miles of new or improved drains	120	118	104	118	128	112
Miles of drains maintained	233	241	213	229	222	197
Acres affected	876,000	857,000	825,000	958,000	1.1M	981,000
Public meetings chaired	345	439	525	504	460	359
Project costs	\$102M	\$94M	\$96M	\$139M	\$179 M	\$172M
Counties served	36	41	38	37	46	42

2022 PROGRAM GOALS:

- Continue the development of a project database to conduct and report program output metrics more efficiently.
- Continue working with the State Archivist for digitizing of active current files and more than 4,000 historic files stored at the Record Center, and thousands of pages of district maps and construction plans.
- All files are manually reviewed, and tens of thousands of non-essential/duplicate documents removed to reduce the files being scanned.
- The files/maps are divided into 50 batches for scanning purposes, and more than half of the files/maps have been scanned with the goal of completing by early 2023.
- A separate scanning contract was initiated with Graphic Sciences Incorporated to accelerate the digitizing of large format plans and maps.
- Continue to provide oversight and input to Spicer Group who is under contract to develop a spatial database and Geographic Information System of all intercounty drains/districts. The current completion date is 2024.
- Monitor impacts of historic Great Lakes and inland water levels and provide timely response to protect infrastructure and property flooding in impacted drainage districts.



KEY STAKEHOLDERS

- County drain, water resource, and public works commissioners
- Agricultural, residential, commercial property owners
- Cities, villages, and townships
- County road commissions
- Michigan Department of Transportation
- Michigan Department of Environment, Great Lakes, and Energy

LEGAL AUTHORITY:

The Drain Code of 1956, Public Act 40 of 1956, as amended, MCL 280.1 et seq.



Michigan Agriculture Environmental Assurance Program

PROGRAM MANAGER: Joe Kelpinski | 517-284-5608 | KelpinskiJ@michigan.gov

The Michigan Agriculture Environmental Assurance Program (MAEAP) is dedicated to helping Michigan's farmers protect the environment in a manner that is performance-based and cost-effective. MAEAP brings together training, risk assessment, technical assistance, conservation practice support, engineering, cost-share, and agency verification in an industry-led partnership dedicated to pollution prevention. It is a legislated certainty program with incentives for farmers to become verified under the program.

IMPACT FOR MICHIGAN:

Michigan is surrounded by 20 percent of the world's available freshwater. It is imperative for current and future generations that the most effective water protection strategies are implemented. Michigan's agriculture industry has taken a lead in supporting MAEAP, which is funded primarily by fees on pesticides and agricultural fertilizers.

2021 ACCOMPLISHMENTS:

- 340 new verifications in fiscal year 2021
- 6,104 total new verifications for the program
- Additional accomplishments are detailed in subsequent reports:
 - Conservation Technical Assistance Initiative
 - Clean Sweep
 - Education
 - Recycling
 - Water Use
 - Aquifer Dispute

MEASURING SUCCESS:

Metric	2019	2020	2021
Verifications	533	392	340
Completed risk assessments	1,852	1,368	780
Sediment stabilized (tons)	414,714	334,983	254,783
Phosphorus contained (pounds)	673,535	551,709	428,584

2022 PROGRAM GOALS:

- To complete Phase 2 of new database by August 1, 2022.
- Achieve 500 new verifications and 550 updated verifications for fiscal year 2022.
- Achieve 6,600 total verifications by end of calendar year 2022.



KEY STAKEHOLDERS

- Farmers and agribusiness
- Michigan Farm Bureau
- Commodity groups
- Conservation districts
- Michigan residents

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 82 (Conservation Practices) and Part 87 (Groundwater and Freshwater Protection), as amended
- Public Acts 1 and 2 of 2011, as amended



MAEAP Conservation Technical Assistance Initiative

PROGRAM MANAGER: Laura Doud | 517-898-4041 | DoudL@michigan.gov

The Conservation Technical Assistance Initiative (CTAI) program provides technical assistance to landowners interested in implementing conservation practices on their land. The CTAI program is a partnership between federal, state, and local units of government, working together to assist farmers and rural landowners. The program assists conservation districts in their efforts to help Michigan residents better understand, plan, manage, protect, and utilize their natural resources.

IMPACT FOR MICHIGAN:

The engineering and construction oversight provided by CTAI brought in \$11.4 million in federal revenues into Michigan that otherwise would have been allocated to other states. CTAI supports farmers' efforts to implement the conservation practices needed for verification under the Michigan Agriculture Environmental Assurance Program. The implementation of these practices spurs the local economy through the purchase of materials and the use of local contractors.

2021 ACCOMPLISHMENTS:

- CTAI employees helped to implement 66 different types of conservation practices.
- 1,089 conservation practices were designed or implemented across 37 Michigan counties.
- More than \$11.4 million was made available for Michigan landowners to implement conservation practices.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Counties Served	51	45	46	46	37
Engineering Staff (FTEs)	5	5	5	5	5
Soil Conservationists (FTEs)	9	9	9	9	9
Practices Designed or Implemented	625	746	975	1129	1089
Federal Cost Share	\$5.3 M	\$7 M	\$10.8 M	\$10.2 M	\$11.4 M

**Full-time employees (FTEs)*

2022 PROGRAM GOALS:

- Continue to work with partners to determine the best placement and types of technical assistance needed across the state.



KEY STAKEHOLDERS

- Farmers
- Agriculture industry groups
- Michigan Farm Bureau
- Commodity groups
- Conservation and environmental groups

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 82 (Conservation Practices) and Part 87 (Groundwater and Freshwater Protection), as amended



MAEAP Clean Sweep

PROGRAM MANAGER: Abigail Eaton | 517-284-5612 | EatonA@michigan.gov

The Michigan Clean Sweep Program helps protect the state's natural resources by facilitating the proper disposal of outdated, unused, or unwanted pesticides. Permanent pesticide drop-off sites, operated by local staff and frequently coordinated with local hazardous waste programs, have been key to program success. The state's conservation districts help arrange many satellite collections, in partnership with local health departments and permanent collection sites. This increases the area and number of people the program can serve. Pesticide disposal costs are covered by the Michigan Agriculture Environmental Assurance Program (MAEAP).

IMPACT FOR MICHIGAN:

The Michigan Clean Sweep program makes it easier for farmers and other homeowners to dispose of pesticides from old barns, basements, homes, and sheds. Investigations of environmental contamination from chemicals can cost tens of millions of dollars, last for many years, and require remediation that may cost more than the investigation. This program helps ensure that the state and its citizens avoid additional costs of accidents, fires, floods, and other disasters.

2021 ACCOMPLISHMENTS:

- Satellite collections were held in 16 counties.
- The program collected 220,415 pounds of pesticides for proper disposal - the second-highest amount since the program's inception.
- After a decrease due to COVID-19 related event cancellations in 2020, collection numbers rebounded.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020	2021
Clean Sweep permanent sites	18	18	17	17	18	18
Clean Sweep satellite counties	15	19	13	17	13	16
Pesticides collected (pounds)	179,470	194,039	184,081	224,922	160,218	220,415
Disposal program costs covered (\$)	230,610	200,000	230,952	270,845	168,690	224,999

2022 PROGRAM GOALS:

- Add one to two additional permanent sites.
- Increase outreach to other counties with 18 satellite collections.
- Streamline reporting requirements to decrease the per-pound cost of disposal.
- Collect and dispose of 230,000 pounds of pesticides.

KEY STAKEHOLDERS:

- Agriculture industry groups
- Michigan agribusiness
- Greenhouse industry
- Residential pesticide users
- Local hazardous waste program

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 82 (Conservation Practices) and Part 87 (Groundwater and Freshwater Protection), as amended
- Public Acts 1 and 2 of 2011, as amended





MAEAP Education for Farmers and Technicians

PROGRAM MANAGER: Joe Kelpinski | 517-284-5608 | KelpinskiJ@michigan.gov

The Michigan Agriculture Environmental Assurance Program (MAEAP) is a nationally recognized proactive environmental assurance program serving Michigan's agricultural industry. Interested farmers enter the program through participation in what is known as a MAEAP Phase 1 training event. These local and statewide events provide farmers with information on participation in MAEAP, as well as associated environmental and risk mitigation topics.

IMPACT FOR MICHIGAN:

Phase 1 events cover environmental practices allowing farmers to qualify for continuing education credits for pesticide use licenses. These events are offered by MAEAP partners, technicians, and online.

2021 ACCOMPLISHMENTS:

- Held 38 Phase 1 meetings for farmers across the state.
- Hosted 2,279 farmers at Phase 1 events.
- Enrolled 209 farms.
- Hosted seven technician specific trainings.

MEASURING SUCCESS:

Metric	2019	2020	2021
Phase 1 trainings held for farmers	155	83	38
Attendees at Phase 1 events	6,662	2,488	2,279
Farmers/landowners that enrolled in MAEAP	533	246	209
Trainings held for technician	6	4	7

2022 PROGRAM GOALS:

- Develop a new on-boarding curriculum for newly hired technicians.
- Further utilize available Michigan State University Extension educational resources for technicians and farmers.
- Revamp the technician employee development and specialization process.
- Continue to facilitate and expand online and virtual farmer education offerings.



KEY STAKEHOLDERS

- Farmers
- MAEAP technicians
- Educational partners

LEGAL AUTHORITY:

Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 82 (Conservation Practices) and Part 87 (Groundwater and Freshwater Protection), as amended, and Public Acts 1 and 2 of 2011, as amended



MAEAP Pesticide Container Recycling

PROGRAM MANAGER: Abigail Eaton | 517-284-5612 | EatonA@michigan.gov

The Michigan Department of Agriculture and Rural Development (MDARD), the Michigan Agri-Business Association, the Ag Container Recycling Council, and G. Phillips and Sons LLC formed a partnership designed to promote the proper cleaning and recycling of pesticide containers. Information on proper container rinsing techniques and recycling locations is distributed by the partnership to pesticide users. A network of agri-businesses and conservation districts are available for the collection and recycling of properly cleaned plastic containers into appropriate post-consumer products. Containers up to 56 gallons in size are accepted.

IMPACT FOR MICHIGAN:

The Michigan Pesticide Container Recycling Program decreases the likelihood that unclean or improperly stored containers will leach pesticide residue into the environment. It also reduces environmental and human health risks by promoting safe container rinsing practices. Plastics can be recycled or converted to other beneficial uses rather than taking up valuable landfill space.

2021 Accomplishments:

- In 2021, a total of 211,527 pounds of empty, properly cleaned pesticide containers were collected and recycled.
- 62 unique agribusinesses and other pesticide end-users participated in 113 collection events.
- More than 2.73 million pounds of plastic collected since 1994.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Pesticide containers recycled (pounds)	175,316	216,408	280,430	169,856	211,527
Agribusinesses collecting containers	43	43	55	52	62

2022 PROGRAM GOALS:

- MDARD will continue outreach to agribusinesses to increase participation with G. Phillips & Sons LLC services.
- Continue upward trend in collection levels with an aim of more than 300,000 pounds.
- Promote partnership with Michigan Department of Environment, Great Lakes, and Energy and the Michigan Recycling coalition to implement and expand a pilot project to include recycling of silage wrap, mulches, and greenhouse covers.



KEY STAKEHOLDERS

- Agriculture industry groups
- Michigan agribusiness
- Greenhouse industry
- Conservation districts
- Ag Container Recycling Council

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 87 (Groundwater and Freshwater Protection), as amended



MAEAP Water Use Reporting

PROGRAM MANAGER: Abigail Eaton | 517-284-5612 | EatonA@michigan.gov

The Water Use Reporting Program requires all water users having a capacity to withdraw water quantities of 100,000 gallons per day or greater to report their water use on an annual basis. Agricultural users report to the Michigan Department of Agriculture and Rural Development at no cost. All other industries report to the Michigan Department of Environment, Great Lakes, and Energy for a fee. Water users are required to submit their annual reports to the State of Michigan by April 1 of the following year.

IMPACT FOR MICHIGAN:

On December 13, 2005, the Great Lakes Governors and Premiers signed the Great Lakes-St. Lawrence River Basin Water Resources Compact (Annex 2001), implementing agreements to provide unprecedented protections for the Great Lakes-St. Lawrence River Basin. Annex 2001 stipulates that within five years of the effective date, each state will create a program for the management and regulation of new or increased large withdrawals to ensure an effective and efficient water management program. The Water Use Reporting Program is Michigan's solution to meeting Annex 2001.

2021 Accomplishments:

- The program managed 1,804 user accounts, for the 2020 season, representing 3,941 farms that own or lease water use from more than 10,463 pumps.
- The program continued to work with the Michigan Department of Technology, Management, and Budget to troubleshoot issues with the MILogin portal, which users must use to interface with the database.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
Users submitting water use online	1,463	1,430	1,225	1,235	1,215
Pumps reported	8,371	8,637	7,593	6,588	6,733
Withdrawal from groundwater (%)	77	77	77	77	79
Withdrawal from surface water (%)	23	23	23	23	21
Irrigated acres reported	595,576	598,311	512,838	537,769	572,646
Water withdrawal (billion gallons)	127	129	113	106	125
Water withdrawal (acre feet)	385,460	399,490	347,923	326,507	382,975

**2021 data will be finalized after April 2022.*

2022 PROGRAM GOALS:

- Rebuild the database used by agricultural large water quantity users to report annually.
- Through education, improve user experience with MILogin to ease access to water use reporting.
- Increase the number of agricultural water users using the online system to report as required.



KEY STAKEHOLDERS

- Agricultural large quantity water use operations
- State governors and premiers of Canadian provinces in the Great Lakes Basin
- Great Lakes Commission
- Agriculture industry groups
- International Joint Commission
- Conservation Districts

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 327 (Great Lakes Preservation), as amended



MAEAP Aquifer Dispute Resolution

PROGRAM MANAGER: Abigail Eaton | 517-284-5612 | EatonA@michigan.gov

The Aquifer Dispute Resolution program allows small quantity well owners to file complaints with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or the Michigan Department of Agriculture and Rural Development (MDARD) if their wells fail to furnish their normal water supply or provide potable water. Agricultural related complaints are investigated by MDARD. The investigation is intended to determine if there is a scientifically-based cause-and-effect between the pumping of the high capacity well and the failure or impairment of the small quantity well. If the high capacity well is found to be the cause, the State of Michigan will propose a remedy to resolve the dispute equitably.

IMPACT FOR MICHIGAN:

The program establishes a process for small quantity well owners to file a complaint with the State of Michigan to investigate when they feel their water supply has been compromised by drawdown from a high capacity well. Without the program, the only recourse is through the courts, under the Common Law/Riparian Doctrine. The burden of proof in these legal cases can be expensive and lengthy.

2021 ACCOMPLISHMENTS:

- One complaint was filed. The complainant was reimbursed for the partial cost of a well replacement.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021
Complaints filed	12	1	1	1
Informally facilitated remedies	0	0	0	0
Resolved/closed conflicts	11	1	0	1
Open complaints	1	0	0	0
Unresolved/disputed complaints	0	0	0	0
Number of invalid complaints	2	1	1	1
Cost to producers for resolution	\$31,590	0	0	\$6,680
Wells replaced or improved	11	0	0	1

2022 PROGRAM GOALS:

- Develop an aquifer dispute resolution tracking process.
- Train more staff to respond to program-related complaints.
- Continue to work with EGLE to develop better methods of obtaining information on potential drawdown impacts of large quantity withdrawals (requiring Geographic Information System) to better meet the required response timeline.



KEY STAKEHOLDERS

- Small capacity drinking water well owners
- Large capacity irrigation well operators
- Private well drillers and pump installers
- Michigan Department of Environment, Great Lakes, and Energy

LEGAL AUTHORITY:

- Natural Resources Environmental Protection Act, Public Act 451 of 1994, Part 317 (Aquifer Protection and Dispute Resolution), as amended



MDARD Spill Response

PROGRAM MANAGER: Michael Wozniak | 517-285-1752 | WozniakM1@michigan.gov

The Spill Response Program provides technical assistance for agrichemical and manure spills, including the approval of the land application of spilled materials at agronomic rates. Individuals with a pesticide, fertilizer, or manure spill can call the Michigan Department of Agriculture and Rural Development's (MDARD) Spill Response line at 800-405-0101. An agreement between MDARD and the Michigan Department of Environment, Great Lakes, and Energy allows for MDARD to take the lead in the state's response to agrichemicals and manure. This voluntary program allows agricultural producers to minimize or eliminate environmental contamination resulting from a spill incident.

IMPACT FOR MICHIGAN:

Michigan's farmers seek to raise food, feed, and fiber in a cost-effective and environmentally sensitive manner. The Spill Response Program provides support to address both aspects when accidents occur. While rare, accidents involving pesticides and/or fertilizers can present significant environmental risk.

2021 ACCOMPLISHMENTS:

- Revised MDARD's Spill Response Manual.
- Conducted department-wide training for all staff who have spill response responsibility.
- Responded to and properly mitigated the impacts of four agrichemical spills.
- 417,850 pounds of spilled products were safely land applied.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Spill incidents reported	11	7	7	8	4
After action reviews completed	-	-	7	8	4
Agronomic application of spilled materials (pounds)	13,953	72,000	13,200	80,680	417,850
Landfill/incineration of spilled materials (pounds)	0	30,000	3,895	0	0

2022 PROGRAM GOAL:

- Conduct after-action interviews within two weeks of each incident.
- Conduct outreach with non-departmental personnel to bring awareness to the program.
- Conduct consistency training with departmental personnel.



KEY STAKEHOLDERS

- Agricultural suppliers and producers
- Environmental advocates and regulators
- Michigan consumers

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Parts 83 (Pesticide Control) and 85 (Fertilizers)



Migrant Labor Housing

PROGRAM MANAGER: Majed Ghussaini | 989-390-7637 | GhussainiM@michigan.gov

The Migrant Labor Housing Program is designed to ensure the safety of housing occupied by five or more migrant agricultural workers. Licensure indicates safe water supplies, fire and structural safety, proper sanitation facilities, proper food preparation, storage facilities, and waste treatment and disposal.

IMPACT FOR MICHIGAN:

Migrant workers play an important role in the planting, cultivating, harvesting, and packaging of 38 labor-intensive crops grown in Michigan. These crops generate \$2.3 billion in farm gate revenues each year. Quality housing is needed to retain Michigan's reputation as a good place to work and attract this much-needed seasonal workforce.

2021 ACCOMPLISHMENTS:

- Program staff worked diligently with stakeholders to ensure safe inspection and licensing continued while concurrently working on addressing MDARD's Pandemic Public Health Measures In Migrant Agricultural Worker Housing Emergency Rules. Staff worked with producers to ensure COVID-19 emergency preparedness plans were drafted and posted, as well as isolation housing was inspected and approved. More than 25,000 free Binax COVID-19 testing kits were distributed to housing and farm operations, drastically reducing COVID-19 outbreaks in migrant housing.
- Program staff worked one-on-one with more than 500 housing providers conducting more than 3,000 housing inspections. The program's efforts ensured Staff responded on time to a record number of plan reviews and H-2A requests while meeting 100 percent of inspection requests for existing camps.
- Staff continued to update and improve the electronic inspection system.
- Staff continued to work with the U.S. Department of Labor and other regulatory partners.
- A new Migrant Labor Housing Advisory Board was established. The Board held several meetings to address agricultural labor housing challenges, recommendations to improve housing, and the quality of living for these workers and their families.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020	2021
Applications						
Not opening/rescinded	43	200	77	83	94	64
Opening	833	853	871	870	829	881
Inspections						
Licensing	1,136	1,132	1,110	1,097	1,059	1,117
H-2A	305	608	752	919	980	1,172
CAP-Follow up	480	558	510	535	422	325
Occupancy	820	830	843	829	753	752
Enforcement/Referrals	12	10	2	6	1	72
Plan Review	154	180	111	82	91	132
Status Check				93	135	208
COVID-19*					1,230	1,108
Total*	2,401	2,443	2,236	2,181	3,590	3,769
Licensing						
Camps	801	811	840	815	830	881
Units	4,147	4,046	4,278	4,052	4,062	3,937
Capacity	24,862	25,054	26,166	25,215	26,734	29,002

* Inspections cover multiple components of camp operation. The total is less than the sum of the individual components.

2022 PROGRAM GOALS:

- Continue effort on a document management system to automate and expedite licensing.
- Continue working with program stakeholders and local health departments on next year's development and implementation of COVID-19 mitigation measures at licensed migrant housing camps.
- Work with the Migrant Labor Housing Advisory Board to improve housing and living conditions for the agricultural labor workforce in the state.
- Improve the geographic information system mapping of all migrant labor housing.
- Ensure preventative measures are in place to keep staff, farmers, and workers from getting COVID-19 and ensure safe housing at each camp location.
- To educate and facilitate climate change by encouraging more camps to install solar panels to offset electrical needs and to begin a camp recycling pilot program.
- Boost Migrant Resource Center participation and awareness locally to inform community of help and services available to migrant workers.



KEY STAKEHOLDERS

- Fruit and vegetable growers
- Migrant farm workers and advocates
- Consumer of fresh fruits and vegetables
- H-2A guest workers program

LEGAL AUTHORITY:

- Public Health Code, Public Act 368, 1978, Part 124, as amended.



H-2A Guest Worker Housing

PROGRAM MANAGER: Majed Ghussaini | 989-390-7637 | GhussainiM@michigan.gov

The Migrant Labor Housing Program is designed to ensure the safety of housing occupied by five or more migrant agricultural workers. Licensure indicates safe water supplies, fire and structural safety, proper sanitation facilities, proper food preparation, storage facilities, and waste treatment and disposal.

IMPACT FOR MICHIGAN:

The H-2A program allows United States employers or agents who meet specific regulatory requirements to bring foreign nationals to the United States to fill temporary agricultural jobs. Housing used by H-2A guest workers in Michigan requires that they meet applicable standards as part of the documentation of the H-2A application. H-2A workers play a vital role in the planting, cultivating, harvesting, and packaging of 38 labor-intensive crops grown in Michigan that generate \$2.3 billion in farm gate revenue each year.

2021 ACCOMPLISHMENTS:

- Provided inspections and paperwork to support timely visa approvals.
- Staff held consultations with farmers.
- Held extensive communications with farm labor contractors and the Foreign Labor Certification Office.
- Conducted proposed new housing plan reviews and performed necessary licensing inspections.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020	2021
Camps	135	257	346	437	492	564
Inspections	305	606	752	1,005	1,488	1,809
Units Licensed	870	1,504	1,875	2,085	2,202	2,469
Licensed Capacity	4,879	8,880	11,383	12,116	15,401	16,583

2022 PROGRAM GOALS:

- Continue partnering with the State of Michigan Foreign Labor Certification Office and explore ways to improve the efficiency of inspection reporting delivery and communication.
- Continue to engage with stakeholders and regulatory agencies to better understand the ever-changing federal laws relevant to the H-2A guest worker program.
- Provide timely inspections and plan reviews for growers and farm labor contractors seeking H-2A workers.



KEY STAKEHOLDERS

- Fruit and vegetable growers
- Migrant farm workers and advocates
- Consumer of fresh fruits and vegetables
- H-2A guest workers program

LEGAL AUTHORITY:

- Public Health Code, Public Act 368, 1978, Part 124, as amended.



Qualified Forest Program

PROGRAM MANAGER: John Switzer | 517-881-5172 | SwitzerJ3@michigan.gov

The Qualified Forest Program (QFP) provides a property tax exemption for private landowners who actively manage their forestland for commercial harvest. The goal of the program is to fuel regional economies through timber harvest and individual tax savings.

IMPACT FOR MICHIGAN:

More than 10 million acres of forested land in Michigan is owned by “non-industrial” private landowners. These lands are currently harvested at one-third the rate of forest growth. Consequently, millions of dollars of timber that could be harvested is going unutilized. By helping landowners manage their forestland, it is estimated that the QFP will stimulate more than 900 additional forestry-related jobs, \$195 million in business revenue, and \$44 million in labor income.

2021 ACCOMPLISHMENTS:

- Enrolled 69,034 new acres, bringing total participation to 805,341 acres.
- Public Act 672 of 2018 increased the limitation of 1.2 million acres of qualified forest property that can be exempted to 2.5 million; eliminated the 640-acre cap on the number of acres that may be enrolled per local unit of government and landowner; clarifying the intent and improving the administration of the program. The legislative changes created an additional opportunity for forest landowners to enroll in the program, further supporting the forest products industry.
- Streamlined and improved queries and functionality of the current database to provide meaningful data to partners in forestry.
- QFP and Forestry Assistance Program are continuing collaborative marketing efforts to landowners that may be eligible for program enrollment, based upon acreage and property classification.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Applications Submitted	681	617	614	452	576
Forest Management Plans Received	587	546	604	432	504
Acres from Commercial Forest (DNR)	1,772	1,512	1,676	1,266	3,835
New Acreage Enrolled	77,224	55,409	167,883	70,679	69,034
Cumulative Acres Enrolled	427,959	483,368	665,628	736,307	805,341
Harvested Wood Products (cords)	112,298	275,402	93,347	352,339	270,788
Harvested Timber Value (dollars)	3,143,995	5,636,097	3,890,722	6,110,208	6,992,302
Revenue Received from 2 Mill Fee	342,114	414,437	482,171	660,810	648,194

2022 PROGRAM GOALS:

- Increase enrollment in the QFP by 100,000 acres for the 2023 tax year.
- Continuous improvements with the QFP database to capture provisions outlined in PA 672 of 2018, and to improve efficiencies in the processing time of applications and data management.
- Continue working with Forestry Assistance Program staff and other marketing partners toward the development and implementation of new and existing targeted marketing campaigns to raise awareness of the benefits of the QFP.
- Meet with forestry stakeholders and other groups (i.e., local units of government) to develop relationships, discuss the QFP and its benefits, and encourage collaborative efforts between the public and private sectors.



KEY STAKEHOLDERS

- Private forestland owners
- Forest plan writers
- Commercial foresters
- Conservation Districts
- Forest products industry

LEGAL AUTHORITY:

- MCL 211.7jj[1] (general provisions)
- MCL 211.1033 (recapture tax imposition)
- MCL 211.1034 (recapture tax rate)
- MCL 324.51305 (private forest land enhancement fund)
- MCL 324.51306 (qualified foresters)
- MCL 380.1211 (exemption of qualified forest property)
- MCL 211.1091-211.1101 (transitional qualified forest)



Right to Farm Complaint Response

PROGRAM MANAGER: Michael Wozniak | 517-284-5618 | WozniakM1@michigan.gov

The Right to Farm (RTF) program responds to nuisance complaints involving farms. Program staff evaluates farm activities to decide whether a farm is following the Generally Accepted Agricultural and Management Practices (GAAMPs). GAAMPs are guidelines for good farm management that also help promote a positive image of Michigan agriculture.

IMPACT FOR MICHIGAN:

Right to Farm Complaint Response assists in resolving nuisance issues related to farming operations. This promotes environmental protection, improved quality of life for non-farm rural residents, and a strong and stable agricultural industry.

2021 ACCOMPLISHMENTS:

- The program received 163 complaints, resulting in a total of 213 complaint response investigations. Some complaints require multiple investigations.
- The program developed new communication materials to help involved parties understand the complaint response process.
- The program maintained an average response rate of five business days.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021
New complaints received	176	193	136	163
Initial inspections conducted within 7 business days	90%	86%	81%	84%
On-farm investigations	251	227	250	213
Complaint cases closed	250	173	127	159

2022 PROGRAM GOALS:

- Implement a new inspection data handling system.
- Reduce average complaint response time to three days or less.
- Work with all stakeholders to understand the Right to Farm Act.
- Work with Michigan farmers to promote GAAMP implementation.



KEY STAKEHOLDERS

- Michigan farmers
- Non-farm rural residents
- Local governments
- Commodity organizations
- State and federal conservation and environmental agencies

LEGAL AUTHORITY:

- Michigan Right to Farm Act, Public Act 93 of 1981, as amended



Right to Farm GAAMPs Revision

PROGRAM MANAGER: Michael Wozniak | 517-284-5618 | WozniakM1@michigan.gov

The Michigan Right to Farm Act provides broad definitions of a farm, its operations, and products as well as a process for the development and adoption of Generally Accepted Agricultural and Management Practices (GAAMPs). GAAMPs are developed by technical advisory review committees and presented to the Michigan Commission of Agriculture and Rural Development for review and approval. The GAAMPs cover the following:

- Manure Management and Utilization
- Pesticide Utilization and Pest Control
- Nutrient Utilization
- Care of Farm Animals
- Cranberry Production
- Site Selection and Odor Control for New and Expanding Livestock Facilities
- Irrigation Water Use
- Farm Markets

IMPACT FOR MICHIGAN:

GAAMPs define socially and environmentally responsible farming practices used as the basis for conformance under the Right to Farm Act. Conformance with GAAMPs can be used as an affirmative defense against nuisance litigation. The number of task force meetings on each set of GAAMPs provides an indicator of the frequency of use as well as updates needed.

2021 ACCOMPLISHMENTS:

- Initiated annual reviews of all eight GAAMPs.
- Piloted a virtual training meeting for committee chairpersons.
- Revised the GAAMPs documents, including formatting enhancements.
- A public input meeting was conducted on August 25, 2021, to receive feedback and input on all draft GAAMPs.

MEASURING SUCCESS:

Review Meetings Held	2016	2017	2018	2019	2020	2021
Manure Management and Utilization	2	1	2	2*	3*	2*
Pesticide Use and Pest Control	0	0	0	0*	0	0
Nutrient Utilization	0	0	0	0	0	1*
Care of Farm Animals	1	1	1	1	1*	1*
Cranberry Production	0	0	0	0	0	0
Livestock Site Selection	5	2	4	2	8*	5*
Irrigation Water Use	0	0	1	2	0	1*
Farm Markets	0	0	0	1	3*	1*

**Committee collaborated remotely or using virtual meeting technologies*

2022 PROGRAM GOALS:

- Increase consistency between the GAAMPs documents.
- Identify ambiguous language across the GAAMPs.
- Continue to improve the facilitation of the review process by offering additional training, information, and technical support to the review committees.



KEY STAKEHOLDERS

- Michigan farmers and commodity organizations
- State and locally elected officials
- Michigan State University and AgBioResearch
- State and federal conservation and environmental agencies

LEGAL AUTHORITY:

- Michigan Right to Farm Act, Public Act 93 of 1981, as amended



Right to Farm Proactive Review

PROGRAM MANAGER: Michael Wozniak | 517-284-5618 | WozniakM1@michigan.gov

The Right to Farm Program can assist farms of all sizes by reviewing the farm operation's conformance with Generally Accepted Agricultural and Management Practices (GAAMPs). The most intensive portion of this activity is in the siting of livestock facilities. This service is designed to help farmers properly plan, site, build, and maintain new and expanding livestock facilities. The Michigan Department of Agriculture and Rural Development works with the farm to evaluate all applicable management practices and facility designs, as well as the proximity to non-farm neighbors and existing land use considerations.

IMPACT FOR MICHIGAN:

On-farm production agriculture is the foundation of Michigan's \$104.7 billion food and agriculture industry, with livestock facilities generating more than \$8.2 billion in annual cash receipts. Yet, there are increasing social and environmental concerns regarding agricultural production in Michigan, especially animal agriculture. Right to Farm proactive reviews allow the industry sector to grow in a responsible way that minimizes nuisance to non-farm neighbors.

2021 ACCOMPLISHMENTS:

- Continued lean process improvement initiative, including the launch of revised application materials.
- Year-to-date, processed 69 total proactive review applications, including twelve for livestock production facilities.
- Responded to 57 applications from small/non-livestock operations, a new program record high.
- Proactive reviews approved in 2021 will annually generate:
 - \$22.1 million in economic activity
 - \$3.9 million in earnings for farm households
 - 223 ongoing full-time jobs
 - \$1.09 million in additional tax revenues

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020	2021
New Site Selection Requests	46	50	49	15	6	8	12
New facilities	13	25	25	7	2	3	8
Expanding facilities	33	25	24	8	4	5	4
Final Approvals by Species							
Dairy	19	10	22	4	2	0	0
Swine	8	20	17	6	7	1	6
Poultry	16	18	9	3	5	3	6
Beef	3	1	0	2	0	0	0
Other	0	1	2	0	0	0	0
Small/Non-Livestock Reviews	37	23	30	49	52	50	57

2022 PROGRAM GOALS:

- Complete initial reviews for all new proactive requests within 20 business days.
- Develop helpful management plan templates for small/non-livestock proactive reviews.
- Implement a process for review and adoption of innovative odor control technologies for new and expanding livestock production facilities.
- Increase education, outreach, and guidance to the agricultural industry on GAAMPs, including those for Site Selection and Odor Control for New and Expanding Livestock Facilities.
- Continue to develop resources to assist technicians, consultants, and landowners submit conformance review applications.



KEY STAKEHOLDERS

- Michigan farmers
- Non-farm rural residents
- Local governments
- Commodity organizations

LEGAL AUTHORITY:

- Michigan Right to Farm Act, Public Act 93 of 1981, as amended



Right to Farm Biosolids

PROGRAM MANAGER: Michael Wozniak | 517-284-5618 | WozniakM1@michigan.gov
Program Coordinator - Steve Mahoney | 517-930-2966 | MahoneyS@michigan.gov

Biosolids are nutrient-rich organic materials resulting from the controlled treatment of sewage sludge. Because of that treatment, biosolids can be safely recycled and applied to farm fields for crop production as fertilizers. While regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), the Michigan Department of Agriculture and Rural Development provides education and technical assistance to farmers, locally elected officials, and other stakeholders on the use of biosolids as fertilizer for crop production.

IMPACT FOR MICHIGAN:

The land application of biosolids at agronomic rates saves Michigan farmers more than \$10 million each year in fertilizer costs. It also reduces municipal sewage treatment waste disposal costs by \$7.9 million each year.

2021 ACCOMPLISHMENTS:

- 86,000 dry tons of biosolids were applied over farmland, with a fertilizer value of \$15.5 million.
- Planned and attended the 2021 Michigan Biosolids Virtual Conference.
- Conducted a demonstration plot and had a display at the 2021 Agro Expo.
- Published four Quarterly *Amendments* Newsletters.
- Published six *Biosolids 101* information sheets.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Biosolids applied (dry tons)	120,000	65,000	64,000	68,000	86,000
Biosolids application area (est. acres)	29,550	21,500	21,300	26,000	33,000
Nitrogen used as fertilizer (est. tons)	4,800	2,780	2,560	3,750	4,760
Phosphorus used as fertilizer (est. tons P ₂ O ₅)	6,900	3,220	3,170	2,040	2,590
Potassium used as fertilizer (est. tons K ₂ O)	600	282	278	200	250
Farm value as fertilizer (approx. N-P ₂ O ₅ -K ₂ O)	\$15M	\$8.5M	\$6.4M	\$7.0M	\$15.5M
Biosolids Conference Participants	0*	105	155	165	112

*No conference in 2017

2022 PROGRAM GOALS:

- Provide education and information to conservation district technicians on the benefits of biosolids. Technicians can then provide education and targeted technical assistance to farmers and local officials in their districts.
- Participate in Michigan Water Environment Association's (MWEA) biosolids committee meetings, activities, and the biosolids conference subcommittee to plan the 2022 Michigan Biosolids Conference.
- Display Biosolids Education materials at the Michigan Townships Association Annual Conference, Agro Expo, and the Michigan Association of Conservation Districts summer and winter conferences.
- Work with AgroLiquid staff to establish and maintain a biosolids demonstration plot.
- Work with Michigan State University Extension, MWEA, EGLE, and Michigan Farm Bureau to promote the beneficial use of biosolids.
- Develop new educational materials.

KEY STAKEHOLDERS

- Michigan Water Environment Association
- EGLE
- Michigan Farm Bureau
- MSU Extension
- Michigan Townships Associations
- Conservation districts
- Local crop producers

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, PA 451 of 1994, Part 24 Rules and Part 31, as amended

