



ENVIRONMENTAL STEWARDSHIP DIVISION

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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 year's annual report gives a snapshot of the outstanding accomplishments of all program areas. The Migrant Labor Housing Program completed the first set of five recommendations to address migrant worker living conditions through a 14-member Migrant Labor Housing Advisory Board. The Right to Farm Program received 156 complaints and completed 200 on-farm investigations, helping resolve local conflict. The Clean Sweep Program collected 207,579 pounds of pesticides for proper disposal. Staff responded to 13 agrichemical spills, properly collecting, and disposing of 38,022 pounds of spilled product.

The Engineering Cooperative Program with the United States Department of Agriculture Natural Resources Conservation Service completed 1,349 engineered practice designs in 33 counties. The Michigan Agriculture Environmental Assurance Program completed 586 farm risk assessments and added 212 new verifications in 2022. This work resulted in keeping an additional 146,184 tons of sediment on the fields and reduced the movement of 234,726 pounds of phosphorus to surface waters.

The Forestry Assistance Program conducted 1,913 on-site visits with family forest owners and received a \$5.4 million grant to replant 6 million trees in the northern portion of the lower peninsula. The Qualified Forest Program enrolled 50,333 acres of privately held forest land all of which will complete a wood harvest during their planning horizon.

The Intercounty Drain Program conducted 393 board meetings servicing 44 counties. The Farmland Open Space and Preservation Program processed land preservation transactions across the entire State and added a net of 29,500 acres to the 3.03 million acres of farmland in the program. And finally, our work with Michigan's 75 conservation districts. These local units of State government play a large part in our efforts. The conservation districts completed a local natural resource needs assessment resulting in 11,719 responses from citizens across the entire state. In addition, the Conservation Programs staff oversaw the implementation and reporting on 172 grants to all 75 conservation districts totaling \$9.8 million.

I am proud to present the 2022 ESD Annual Report. It reflects the creativity, flexibility, and industry that are integral characteristics of ESD staff and our partners.

Jim Johnson
Division Director
Environmental Stewardship Division



Business Unit

PROGRAM MANAGER: Charmaine Shellman | 517-290-8114 | ShellmanC3@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:

Prior to 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 standardized ESD's procedures, thereby 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.

2022 ACCOMPLISHMENTS:

- Continued to refine and improve remote working capabilities for all 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 202 grants in 18 different categories.
- Established and administered 74 new operations grants to conservation districts.
- Implemented Simplifile process for Farmland and Qualified Forest programs.
- Coordinated the implementation of a RightFax system for Farmland program efficiency.
- Started processing Conservation Reserve Enhancement Program cost-share payments.
- Communicated Michigan Department of Agriculture and Rural Development's diversity, equity, and inclusion initiatives to ESD managers and staff.

MEASURING SUCCESS:

Metric	2020	2021	2022
Grants			
Specific types	14	19	18
Originated and processed	133	133	202
Payments processed	541	554	649
Spending Plan			
Appropriation line items	9	8	11
Funds managed – federal	3	3	3
Funds managed – state restricted	5	5	5
Staff Supported	66	64	66
Portion of Budget charged to General Fund	25.9%	37.1%	71.90%
Office Management			
Computers Refreshed	12	25	7
Smart phone updates	30	8	47

2023 PROGRAM GOALS:

- Continue technology and reporting upgrades.
- Develop efficiency gains with the new Statewide Integrated Governmental Management Application Enterprise software.
- Continue to refine electronic and remote working capabilities.
- Continue cross divisional trainings and professional growth opportunities for staff.
- Begin administering \$25 million in best management practices for the Western Lake Erie Basin.
- Oversee administration of the \$5.4 million Regional Conservation Partnership Program Tree Planting Project.
- Coordinate a Diversity, Equity, and Inclusion Liaison in ESD.



KEY STAKEHOLDERS:

- ESD program managers and staff
- Michigan Department of Agriculture and Rural Development's Budget Office
- Accounting Services Division
- Conservation Districts
- Other state agencies
- Federal government

LEGAL AUTHORITY:

- Omnibus Budget Appropriations Bill, Public Act 252 of 1994, as amended



Conservation District Operations

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

Michigan's conservation districts are local units of government who 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 (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 the primary mechanism by which MDARD conservation programs are delivered to private landowners.

IMPACT FOR MICHIGAN:

Michigan's food and agriculture sector contributes \$104.7 billion to 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 to help protect and conserve Michigan's natural resources: Michigan Agriculture Environmental Assurance Program, Forestry Assistance Program, Conservation Technical Assistance Initiative, Michigan Produce Safety Program, and Michigan Conservation Reserve Enhancement Program.

2022 ACCOMPLISHMENTS:

- Successful implementation of new operations grants for conservation districts.
- Administered 160 operational element reviews helping conservation districts build operational capacity and enhanced grant delivery.
- Completed 259 grant progress review evaluations.
- Provided 219 instances of operational capacity building assistance to conservation districts.
- Attended 242 conservation district board meetings.
- Provided grant program delivery support to 74 conservation districts who collectively received more than \$9.8 million in grant funding for the delivery of MDARD programs.
- Completed a natural resource needs assessment which resulted in 11,719 responses from people across Michigan.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Number of conservation districts	75	75	75	75	75
Number of district managers	70	70	70	70	73
Total district staff (full-time employees and seasonal staff)	282	241	282	284	317
Number of districts receiving ESD grants	57	52	55	55	74*
Total number of ESD grants to districts	127	94	100	98	172
Value of ESD grants to districts (millions)	\$6.65	\$8.08	\$6.9	\$6.69	\$9.83
ESD grant program progress reviews	383	501	417	224	259
Conservation district board meetings attended	163	152	183	172	242
Conservation district employee search and selection assistance	40	27	24	44	37
Conservation district capacity building assistance	52	79	193	156	219
District employee development assistance	36	20	49	35	88

*Macomb Conservation District was nonfunctional and unable to execute their operations grant.

2023 PROGRAM GOALS:

- Continue to support the successful implementation of operations grants to conservation districts.
- Strengthen collaboration within the Division to better meet programmatic goals and grantees' needs.
- Complete a rewrite of the conservation district accounting manual.
- Develop a revised grant progress review to provide better feedback to program managers and grantees.
- Finalize an updated record retention schedule for conservation district documents.
- Continued implementation of Conservation Programs' five-year strategic plan for working with conservation districts.
- Continue to support progress towards a formal Michigan Conservation Partnership.



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 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 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.

2022 ACCOMPLISHMENTS:

- Established an automated process within the database to send expired agreement requests to the Michigan Department of Treasury.
- Created a new process for recording documents electronically.
- Implemented a more secure process to issue payments.
- Annual equalization reports available online to provide on-demand access.
- Implemented an operator for the program mainline to route callers more effectively.
- Contributed to climate change initiatives by reviewing and approving one wind turbine project and three solar development projects, expected to generate a total of 260-Megawatt hours of renewable energy.
- Farmland staff completed approximately 27,000 individual actions within the database and reviewed more than 4,000 requests submitted by landowners.
- Managed thousands of customer phone calls.
- Received and processed more than 25,000 individual pages of mail.
- Received more than 5,000 customer emails and faxes.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Request Processing (rounded values)					
Applications reviewed	650	600	600	450	500
Transfers reviewed	2,750	1,550	900	1,200	1,550
Extensions reviewed	2,400	1,600	700	1,650	1,050
Expirations reviewed	400	250	100	300	100
Splits reviewed	400	300	150	250	250
Other reviewed	750	700	450	650	550
Documents prepared	7,900	5,750	2,600	4,500	4,000
Program Participation (rounded values)					
New acres enrolled	43,000	34,000	27,500	27,000	29,500
Acres expired/released	132,500	36,500	25,500	34,000	35,500
Tax credits issued (\$ millions)	53	60	57	67	58
Total acres enrolled (millions)	3.24*	3.26*	3.28*	3.10	3.03
<i>*Estimate reported includes expired agreements.</i>					

2023 PROGRAM GOALS:

- Identify additional resources to meet a program goal to process the initial review of new requests within 60 days of receipt.
- Continue to propose additional statute amendments to make the program more adaptable to the needs of our customers.
- Additional outreach to landowners, local agencies, and environmental stakeholders to provide program information and encourage participation in farmland conservation.
- Continue to deliver, above and beyond, the statutory requirements of the program to meet demands for renewable energy through the review of additional wind and solar energy projects.



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



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 keeping 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 27,000 acres of land in conservation easements contributed to the estimated \$104.7 billion of Michigan's total food and agriculture economy.

2022 ACCOMPLISHMENTS:

- The Conservation Easement Donation Program closed on three new conservation easements, covering a total of 361 acres.
- The Michigan Agricultural Preservation Fund completed the application cycle for fiscal year 2022 with \$2 million available to local farmland preservation programs. Eight grants were awarded to local farmland preservation programs to preserve 1,213 acres of land.
- The application cycle for fiscal year 2023 began in October 2022 with \$2 million available for local farmland preservation programs. Twenty-four qualified local farmland programs were eligible to submit applications. Submitted applications will be reviewed, scored, and awarded by March 2023.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
New Conservation Easements					
Conservation easements recorded	8	5	4	3	5
Acreage enrolled	480	668	289	514	530
Program Total Conservation Easements					
Conservation easements recorded	141	146	150	153	158
Local conservation easements	11	11	12	14	16
Acreage enrolled	25,518	26,186	26,475	26,989	27,519
Easement Monitoring					
Donated development rights	61	66	69	70	73
State purchase of development rights	50	50	50	50	50
USDA farm and ranch land	21	21	21	21	21
Total	132	137	140	141	144

2023 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.*



Forestry Assistance

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

The Forestry Assistance Program 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.

2022 ACCOMPLISHMENTS:

- Conducted 1,913 landowner site visits.
- Referred \$9.9 million in forest management projects for private landowners.
- Completed 41 risk assessments for the Michigan Agriculture Environmental Assurance Program's Forest, Wetlands, and Habitat System.
- Completed 24 American Tree Farm inspections.
- Delivered 263 outreach events targeted to family forest owners, foresters, and loggers.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021	2022
Outreach events	407	368	398	190	210	263
On-site visits to family forest owners	2,037	2,007	2,098	2,021	2,143	1,913
Service referrals to the private sector	864	1,070	1,129	1,107	1,101	938
Service referrals to the public sector	663	907	797	1,999	1,064	1,092
Service referrals for timber harvest	335	413	426	360	385	287
Estimated value of referrals (millions)	\$10.1	\$9.7	\$11.9	\$13.4	\$10.5	\$9.9
Acres referred to Qualified Forest	77,224	55,409	167,883	71,381	69,034	50,333

2023 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.

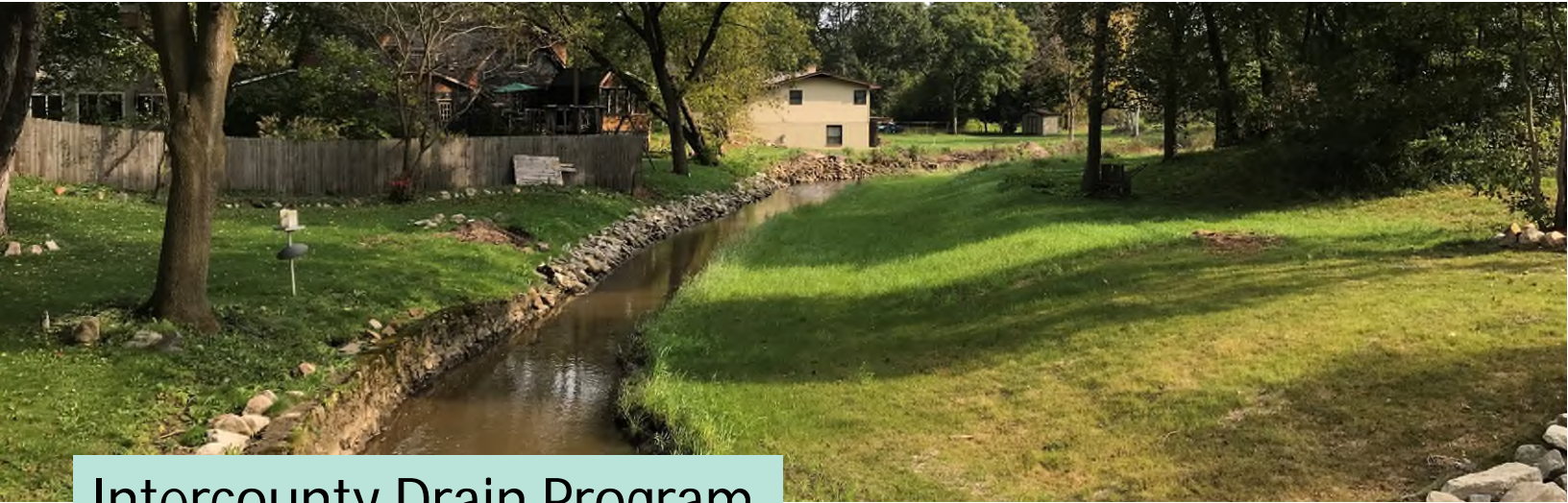


KEY STAKEHOLDERS:

- 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 to administer 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 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 play 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.

2022 ACCOMPLISHMENTS:

- Significant progress made on the file and map scanning project with the State Archivist and Geographic Information Systems (GIS) contract with Spicer Group.
- The \$11.1 million Little Tobacco River (Clare and Isabella) project was completed. It replaced nine bridges and 2.83 miles of channel.
- The \$5.4 million Waldo Drain (Bay and Midland) project was completed. It reconstructed 20.5 miles of drain.
- The \$45 million, six-year reconstruction of the Milk River Retention Treatment Basin pumping station (Macomb & Wayne) was completed. The system collects, pumps and treats over 1.5 billion gallons of stormwater and sanitary annually from 30,000 residents and highly urbanized properties.
- The Misteguay Creek (Genesee, Saginaw, and Shiawassee) \$8.4 million project was completed. The dikes/dam protect over 15,000 acres of prime farmland in Saginaw county out of the 115,000-acre watershed. It covers 10 townships and dikes/dam stretches 22 miles.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021	2022
Miles of new or improved drains	118	104	118	128	112	127
Miles of drains maintained	241	213	229	222	197	225
Acres affected	857,000	825,000	958,000	1.1M*	981,000	1.25M*
Public meetings chaired	439	525	504	460	359	393
Project costs (millions)	\$94	\$96	\$139	\$179	\$172	\$183
Counties served	41	38	37	46	42	44

**M is for millions.*

2023 PROGRAM GOALS:

- Maintain a high level of engagement to coordinate and provide leadership to county drain/water resource and public works commissioners to maintain and improve the existing 1,000 intercounty drains and the creation of new infrastructure systems for the protection of health and property and to promote economic development.
- Complete the initial manual review and coordinate the digitizing by the State Archivist of the more than 4,000 paper files and maps stored at the Record Center and in Constitution Hall.
- Continue to provide oversight and direction to contractor Spicer Group to develop a spatial database and GIS system for all intercounty drains/districts with an expected completion in late 2023.
- Continue to participate as a member of the Board of Directors and committees of the Michigan Association of County Drain Commissioners and attend their educational conferences and meetings.
- Continue the development of project databases to be able to report program metrics more accurately.
- Recognize the 100th year of the Intercounty Drain Program.



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, 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.

2022 ACCOMPLISHMENTS:

- Completed 212 new verifications in fiscal year 2022.
- Reached 6,316 total verifications for the program.
- Additional accomplishments are detailed in subsequent reports:
 - Conservation Technical Assistance Initiative
 - Clean Sweep
 - Education
 - Recycling
 - Water Use

MEASURING SUCCESS:

Metric	2020	2021	2022
Verifications	392	340	212
Completed risk assessments	1,368	780	586
Sediment stabilized (tons)	334,983	254,783	146,184
Phosphorus contained (pounds)	551,709	428,584	234,726

2023 PROGRAM GOALS:

- Complete additional refinements and enhancements to the MAEAP database by December 31, 2023.
- Achieve 400 new verifications and 550 updated verifications for fiscal year 2023.
- Achieve 6,700 total verifications by end of calendar year 2023.



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 \$12.3 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.

2022 ACCOMPLISHMENTS:

- CTAI employees helped to implement 66 different types of conservation practices.
- 1,089 conservation practices were designed or implemented across 33 Michigan counties.
- More than \$12.3 million was made available for Michigan landowners to implement conservation practices.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Counties served	45	46	46	37	33
Engineering staff (FTEs)	5	5	5	5	5
Soil conservationists (FTEs)	9	9	9	9	9
Practices designed or implemented	746	975	1,129	1,089	1,349
Federal cost-share (millions)	\$7	\$10.8	\$10.2	\$11.4	\$12.3

**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 the program's 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.

2022 ACCOMPLISHMENTS:

- Satellite collections held in 18 additional counties.
- The program collected 207,579 pounds of pesticides for proper disposal - the third-highest amount collected since the program's inception.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021	2022
Clean Sweep permanent sites	18	17	17	18	18	18
Clean Sweep satellite counties	19	13	17	13	16	18
Pesticides collected (pounds)	194,039	184,081	224,922	160,218	220,415	207,579
Disposal program costs covered (dollars)	\$200,000	\$230,952	\$270,845	\$168,690	\$224,999	\$223,492

2023 PROGRAM GOALS:

- Add one to two additional permanent sites.
- Increase outreach for collection to 20 satellite counties.
- Investigate options to stabilize the per-pound cost for disposal of product.
- 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 farm assurance program serving Michigan's diverse agricultural industry. Interested farmers enter the program through participation in a qualifying Producer Education event, also known as a Phase 1 training event. These local and statewide opportunities provide farmers with information on participation in MAEAP as well as associated environmental and risk mitigation topics. MAEAP leverages partner support to provide content, locations, and more for these events.

IMPACT FOR MICHIGAN:

MAEAP Producer Education events cover environmental practices often allowing farmers to additionally qualify for continuing education credits for pesticide use licenses. MAEAP Producer Education events are held in-person and online by partners and technicians. MAEAP grants conservation districts, statewide, with funding for local technicians to implement the program. Their skills and ability to keep up with program and industry standards is key to a sustainable, impactful program. They are the everyday, boots on the ground, connection with the farmers.

2022 ACCOMPLISHMENTS:

- Held 86 Producer Education events for farmers across the state.
- Hosted 11,840 farmers at producer education events.
- Enrolled 340 farms.
- Hosted six technician specific trainings.

MEASURING SUCCESS:

Metric	2020	2021	2022
Producer education events held for farmers*	83	38	86
Attendees at producer education events*	2,279	7,706	11,840
Farmers/landowners enrolled in MAEAP	246	209	340
Trainings held for technicians	4	7	6

**Events are held by MAEAP, technicians, and partner organizations.*

2023 PROGRAM GOALS:

- Develop a hybrid onboarding curriculum for newly hired technicians.
- Utilize available Michigan State University Extension educational resources for technicians and farmers.
- Define technician specialists and their role within the program.
- Expand training resources for technicians and partner organizations.



KEY STAKEHOLDERS:

- Farmers
- Local 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, 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 agribusinesses 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.

2022 ACCOMPLISHMENTS:

- In 2022, a total of 196,080 pounds of empty, properly cleaned pesticide containers were collected and recycled.
- Sixty unique agribusinesses and other pesticide end-users participated in 114 collection events.
- More than 2.92 million pounds of plastic collected since 1994.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Pesticide containers recycled (pounds)	216,408	280,430	169,856	211,527	196,080
Agribusinesses collecting containers	43	55	52	62	60

2023 PROGRAM GOALS:

- Continue outreach to agribusinesses to increase participation with G. Phillips & Sons LLC services.
- Continue upward trend in collection levels with an aim of 300,000 pounds.
- Work with Michigan conservation districts to expand producer participation through special recycling events.



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 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.

2022 ACCOMPLISHMENTS:

- The program managed more than 1,750 active user accounts, for the 2021 season, representing 3,762 self-described farms owning or leasing water use for more than 10,605 pumps.
- The program continues to work with the Michigan Department of Technology, Management, and Budget to troubleshoot issues with the MI Login portal, which users must use to interface with the database.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021
Users submitting water use online	1,430	1,225	1,235	1,215	1,187
Pumps reported	8,637	7,593	6,588	6,733	6,673
Withdrawal from groundwater (%)	77	77	77	79	80
Withdrawal from surface water (%)	23	23	23	21	20
Irrigated acres reported	598,311	512,838	537,769	572,646	544,618
Water withdrawal (billion gallons)	129	113	106	125	109
Water withdrawal (acre feet)	399,490	347,923	326,507	382,975	334,968

**2022 data will be finalized after April 2023.*

2023 PROGRAM GOALS:

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

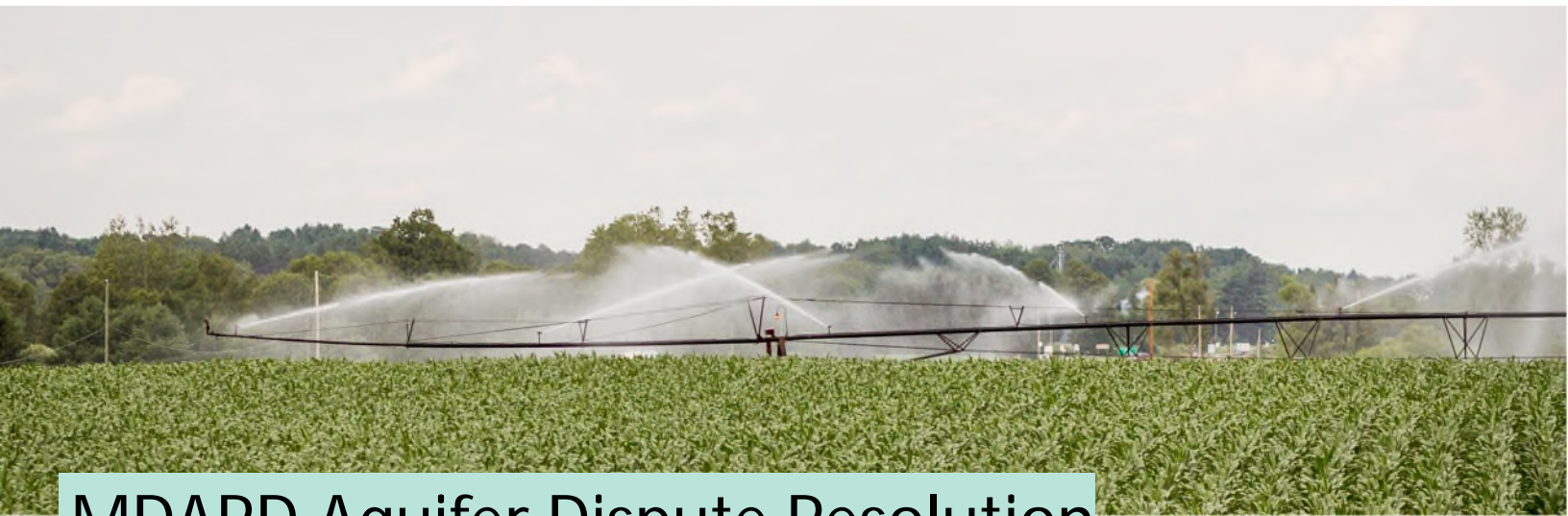


KEY STAKEHOLDERS:

- 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



MDARD Aquifer Dispute Resolution

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

2022 ACCOMPLISHMENTS:

- Ten complaints were filed. One complainant reported reimbursement for the partial cost of a well replacement.
- Completed a program Lean Process Improvement project.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Complaints filed	12	1	1	1	10
Informally facilitated remedies	0	0	0	0	4
Resolved/closed conflicts	11	1	0	1	8
Open complaints	1	0	0	0	2
Unresolved/disputed complaints	0	0	0	0	1
Number of invalid complaints	2	1	1	1	3
Cost to producers for resolution (dollars)	\$31,590	\$0	\$0	\$6,680	\$4,000*
Wells replaced or improved	11	0	0	1	1

**Estimated amount*

2023 PROGRAM GOALS:

- Implement a robust 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 quantity well owners
- High capacity well owners
- 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 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 (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 agrichemical and manure spills. 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.

2022 ACCOMPLISHMENTS:

- Conducted training for all staff who have spill response responsibility.
- Received and triaged 39 calls.
- Responded to and mitigated the impacts of 13 agrichemical spills.
- 38,022 pounds of spilled products were safely land applied.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Spill incidents reported	7	7	8	4	13
After action reviews completed	-	7	8	4	12
Agronomic application of spilled materials (pounds)	72,000	13,200	80,680	417,850	38,022
Landfill/incineration of spilled materials (pounds)	30,000	3,895	0	0	568

2023 PROGRAM GOAL:

- Conduct after-action interviews within 30 days of each incident.
- Conduct outreach to non-department personnel to bring awareness to the program.
- Conduct consistency training with department 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.

2022 ACCOMPLISHMENTS:

- Program staff worked diligently with stakeholders to ensure safe inspection and licensing of migrant labor housing.
- Program staff worked one-on-one with more than 500 housing providers and conducted more than 3,000 housing inspections. These efforts ensured safe housing and proper sanitation for more than 28,000 migrant occupants.
- Amidst the challenges of COVID-19, staff responded to a record number of plan reviews and H-2A requests, while meeting inspection requests for existing camps.
- Staff continued to update and improve the electronic inspection system.
- Continued to work with U.S. Department of Labor and other regulatory partners.
- The Migrant Labor Housing Advisory Board continued to work on a series of five recommendations, which include housing design, investment in migrant housing, siting and zoning, broadband in rural communities as well as creating a better understanding of migrant communities in rural Michigan.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021	2022
Applications						
Not opening/rescinded	200	77	83	94	64	69
Opening	853	871	870	829	881	980
Inspections						
Licensing	1,132	1,110	1,097	1,059	1,117	1,214
H-2A	608	752	919	980	1,172	1,736
CAP-Follow up	558	510	535	422	325	429
Occupancy	830	843	829	753	752	792
Enforcement/Referrals	10	2	6	1	72	59
Plan Review	180	111	82	91	132	174
Status Check			93	135	208	245
COVID-19				1,230	1,108	0
Total*	2,443	2,236	2,181	3,590	3,769	2,913
Licensing						
Camps	811	840	815	830	881	980
Units	4,046	4,278	4,052	4,062	3,937	4,125
Capacity	25,054	26,166	25,215	26,734	29,002	31,225

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

2023 PROGRAM GOALS:

- Continue updating and optimizing the electronic inspection system.
- Continue improving model housing plans supporting reduce cost/modular building technologies.
- Continue working on the document management system to automate and expedite licensing.
- Continue working with program stakeholders and local health departments on related public health issues concerning migrant labor housing.
- Conduct a housing survey and identify issues of concerns from the occupant's perspective.
- Work with the Migrant Labor Housing Advisory Board to improve housing and living conditions for the agricultural labor work force in the state.
- Improve the geographic information system mapping of all migrant labor housing.
- Update existing standard operating procedures and memorandum of understandings with partner agencies to improve licensing processing efficiency.

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 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 dollars in farm gate revenue each year.

2022 ACCOMPLISHMENTS:

- Met the growing H-2A demands, including providing inspections and paperwork to support timely visa approvals.
- Staff conducted proposed new housing plan reviews and performed necessary licensing inspections.
- Developed a shared electronic inspection reporting system to share H-2A inspection reports with the Michigan Foreign Certification Office and Department of Labor and Economic Opportunity to enhance and expedite approval of housing used by H-2A workers.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020	2021	2022
Camps	257	346	437	492	564	717
Inspections	606	752	1,005	1,488	1,809	2061
Units Licensed	1,504	1,875	2,085	2,202	2,469	2867
Licensed Capacity	8,880	11,383	12,116	15,401	16,583	20,446

2023 PROGRAM GOALS:

- Continue partnering with the 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.

2022 ACCOMPLISHMENTS:

- Enrolled 50,333 new acres, bringing total participation to 855,675 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.

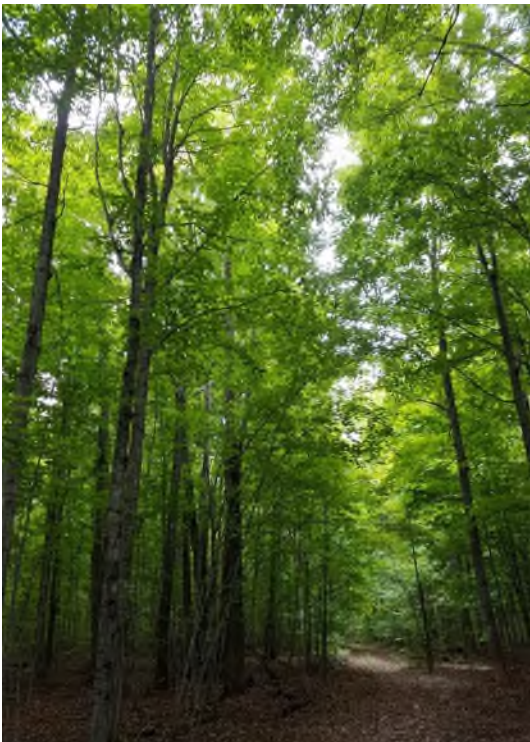
MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Applications Submitted	617	614	452	576	375
Forest Management Plans Received	546	604	432	504	355
Acres from Commercial Forest (DNR)	1,512	1,676	1,266	3,835	N/A*
New Acreage Enrolled	55,409	167,883	70,679	69,034	50,333
Cumulative Acres Enrolled	483,368	665,628	736,307	805,341	855,675
Harvested Wood Products (cords)	275,402	93,347	352,339	270,788	749,905
Harvested Timber Value (dollars)	\$5,636,097	\$3,890,722	\$6,110,208	\$6,992,302	\$9,721,478
Revenue Received from 2 Mill Fee (dollars)	\$414,437	\$482,171	\$660,810	\$648,194	\$499,756

**The transitional qualified forest program allowing acres to transfer from the Commercial Forest program into the Qualified Forest program sunset on September 1, 2021.*

2023 PROGRAM GOALS:

- Increase enrollment in the program by 100,000 acres for the 2024 tax year.
- Continuous improvements with the program's database to capture provisions outlined in P.A. 672 of 2018 and 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 program.
- Meet with forestry stakeholders and other groups (i.e., local units of government) to develop relationships, discuss the program 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 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. Due to this controlled 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.

2022 ACCOMPLISHMENTS:

- 90,239 dry tons of biosolids were applied on farmland, with a fertilizer value of \$15.5 million.
- Planned and attended the 2022 Michigan Biosolids Conference.
- Conducted a demonstration plot and had a display at the 2022 Agro Expo.
- Published four Quarterly *Amendments* newsletters.
- Published six *Biosolids 101* information sheets.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
Biosolids applied (dry tons)	65,000	64,000	68,000	86,000	89,000
Biosolids application area (est. acres)	21,500	21,300	26,000	33,000	34,200
Nitrogen used as fertilizer (est. tons)	2,780	2,560	3,750	4,760	4,900
Phosphorus used as fertilizer (est. tons P ₂ O ₅)	3,220	3,170	2,040	2,590	2,680
Potassium used as fertilizer (est. tons K ₂ O)	282	278	200	250	260
Farm value as fertilizer (approx. N-P ₂ O ₅ -K ₂ O) (millions)	\$8.5	\$6.4	\$7.0	\$15.5	\$14.2
Biosolids Conference Participants	105	155	165	112	119

2023 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 2023 Michigan Biosolids Conference.
- Display biosolids educational materials at the Michigan Township 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
- Michigan Department of Environment, Great Lakes, and Energy
- Michigan Farm Bureau
- Michigan State University 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



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 evaluate farm activities to determine whether a farm is following the Generally Accepted Agricultural and Management Practices (GAAMPs). GAAMPs are guidelines for good farm management promoting 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.

2022 ACCOMPLISHMENTS:

- Conducted 189 complaint response investigations and received 156 new complaints.
- Rolled out a new database for better tracking of complaints.
- Overhauled the RTF website for better organization and focus on resources for producers and complainants.

MEASURING SUCCESS:

Metric	2018	2019	2020	2021	2022
New complaints received	176	193	136	163	156
Initial inspections conducted within 7 business days	90%	86%	81%	84%	80%
On-farm investigations	251	227	250	213	200
Complaint cases closed	250	173	127	159	103

2023 PROGRAM GOALS:

- Reduce average complaint response time to five days or less.
- Continue to develop resources for producers to meet conformance with the GAAMPs.
- Work with all stakeholders to understand the Right to Farm Act.
- Work with Michigan farmers to promote the implementation of GAAMPs.



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:

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

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.

2022 ACCOMPLISHMENTS:

- Initiated annual reviews of all eight GAAMPs.
- Piloted a virtual training session for committee chairpersons.
- Revised GAAMPs documents, including formatting enhancements.
- A public input meeting was conducted on August 25, 2022, to receive feedback and input on all draft GAAMPs.

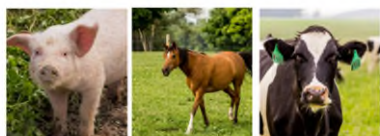
MEASURING SUCCESS:

Review Meetings Held	2017	2018	2019	2020	2021	2022
Manure Management and Utilization	1	2	2*	3*	2*	2*
Pesticide Use and Pest Control	0	0	0*	0	0	0
Nutrient Utilization	0	0	0	0	1*	0
Care of Farm Animals	1	1	1	1*	1*	2*
Cranberry Production	0	0	0	0	0	0
Livestock Site Selection	2	4	2	8*	5*	2*
Irrigation Water Use	0	1	2	0	1*	0
Farm Markets	0	0	1	3*	1*	1

**Committee collaborated remotely or using virtual meeting technologies.*

2023 PROGRAM GOALS:

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



Generally Accepted Agricultural and
Management Practices for Manure
Management and Utilization

2022
Michigan Commission of Agriculture & Rural
Development
PO BOX 30017
Lansing, MI 48909



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.

2022 ACCOMPLISHMENTS:

- Processed 84 total applications, including eight for livestock production facilities.
- Responded to 76 applications from small/non-livestock operations, a new program record high.
- Proactive reviews approved in 2022 will annually generate:
 - \$17.9 million in economic activity
 - \$3.4 million in earnings for farm households
 - 206 ongoing full-time jobs
 - \$913,900 in additional tax revenues

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020	2021	2022
New Site Selection Requests	50	49	15	6	8	12	4
New facilities	25	25	7	2	3	8	1
Expanding facilities	25	24	8	4	5	4	3
Final Approvals by Species							
Dairy	10	22	4	2	0	0	1
Swine	20	17	6	7	1	6	2
Poultry	18	9	3	5	3	6	1
Beef	1	0	2	0	0	0	2
Other	1	2	0	0	0	0	2
Small/Non-Livestock Reviews	23	30	49	52	50	57	76

2023 PROGRAM GOALS:

- Complete initial reviews for all new small farm 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



Western Lake Erie Basin

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In accordance with Executive Directive 2019-14 and within the framework of the 2018 Michigan Lake Erie Domestic Action Plan (DAP), the state developed an Adaptive Management Plan (AMP) that serves as a companion document to the DAP. The AMP identifies additional steps needed to ensure that Michigan meets its specific DAP objectives of a 40 percent reduction in phosphorus from the 2008 water quality monitoring baseline by 2025 (Table 1). The AMP outlines a process to determine whether activities are succeeding or failing to meet water quality goals. It also includes enhanced monitoring and assessment initiatives to better track conservation planning and implementation actions in the Western Lake Erie Basin (WLEB) by the state and its partners.

IMPACT FOR MICHIGAN:

The WLEB experienced the reappearance of significant algal blooms. Some algal blooms are harmful to aquatic life, can present challenges for drinking water treatment, and are caused in part by municipal point sources such as wastewater treatment plants and excessive nutrient runoff from agriculture nonpoint sources (NPS). With four key wastewater treatment facilities in the WLEB meeting reduced phosphorus permit limits, the focus is on accelerating conservation in the right places across the WLEB watersheds to reduce nutrient losses off-field and keep nutrients in the root zone for crop utilization. The state cannot achieve goals and objectives alone – all stakeholders – must be engaged to implement the actions that will result in a healthier Lake Erie.

2022 Accomplishments:

- A \$25 million appropriation by the Legislature for fiscal years 2022-2026 titled *Agricultural Nutrient Best Management Voluntary Practices Program* provides state resources to leverage and accelerate conservation efforts in the WLEB. A stakeholder advisory group was formed to advise Michigan Department of Agriculture and Rural Development (MDARD) on the spending plan priorities.
- MDARD hired a WLEB Strategist to oversee the planning and implementation of DAP and AMP efforts, including building stakeholder relationships and tracking progress in the WLEB.
- MDARD funded four Conservation Specialists, hired by WLEB Conservation Districts, to provide focused technical assistance to producers in five high priority smaller sub watersheds within the WLEB.
- The Conservation Reserve Enhancement Program and the Regional Conservation Partnership Program are being used for conservation planning and implementation in the WLEB.

MEASURING SUCCESS:

Table 1. The DAP watershed-based priority objectives, including the 2008 baseline total phosphorus amounts used to determine the 40 percent reduction goals highlighted in green (in Metric Tons).

Priority Objective by Watershed	2008 Baseline Amount (Metric Tons)	40 Percent Reduction Goal Amount by 2025 (Metric Tons)
River Raisin Watershed Total Phosphorus Load	172	69
MI Upper Maumee River Total Phosphorus Load (Bean Creek & St. Joseph River Watersheds)	267	107
Ottawa-Stony Direct Drainage Watersheds, including other potential areas TBD, Total Phosphorus Load	184	73
Total Michigan Total Phosphorus Nonpoint Source Load Allocation	623	249
Total River Raisin <i>Spring</i> Total Phosphorus Load	83	33

How did we measure success this year? The most substantial progress to date has been reduction of point source loads via upgrades to wastewater treatment facilities. Reaching our 2025 goal of reducing total phosphorus loads by 40 percent will be difficult. The water quality gaging stations in these watersheds have not detected a downward trend in nutrient loading. Additional factors such as weather variability and flooding can affect tributary monitoring.

2023 PROGRAM GOALS:

- Continue discussions with state, federal, and local partners about how changes in the entire WLEB will be monitored, tracked, and reported to account for and improve our understanding of the human and ecological processes that influence nutrient loading in the WLEB and entire Lake Erie watershed.
- Form a WLEB advisory group to confirm the value of DAP and AMP nutrient reduction actions and provide input to appropriately frame them to avoid public misunderstanding and/or misinformation.
- Nutrient reduction work is characterized by a cross-sector, collaborative effort including necessary commitments to help achieve the target of a 250 metric ton total phosphorus load reduction by 2025.
- Both rural and urban stakeholders in the WLEB understand and support nutrient reduction actions that are, or can be, taken in their community to accelerate progress.



KEY STAKEHOLDERS:

- Producers and landowners
- Conservation Districts
- Agribusiness service providers
- Non-profit organizations
- WLEB advisory groups
- State, federal, local units of government

LEGAL AUTHORITY:

- Section 1001 of 2021 PA 87, requires MDARD to annually reporting on the *Agricultural Nutrient Best Management Voluntary Practices Program*.
- Current regulatory authority under the federal Clean Water Act and the state's Part 31 of the Natural Resources and Environmental Protection Act are limited for controlling agricultural NPS pollution.