



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 in implementing 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, but the 2020 pandemic made doing this work a tremendous challenge.

This was a very hard year for agriculture. Michigan farmers persevered through difficult early weather and challenging crop prices. Although the summer proved to be very good for crop production, the pandemic played a significant role in work related issues. Through it all, farmers continued to be great stewards of our land and water, while producing more than 300 different commodities. All this while assuring worker safety through social distancing, using personal protection equipment, and implementing workforce COVID-19 testing requirements.

For ESD, this resulted in delayed on-site Michigan Agriculture Environmental Assurance Program verifications, carefully scheduled and conducted Right to Farm investigations and a whole new set of inspection protocols for Migrant Labor Housing licensing. Intercounty Drains continued working on approximately \$200 million in drainage infrastructure investment using virtual meeting platforms. Michigan conservation districts continued to see technicians working with private woodlot owners and farmers to implement land improvement best management practices.

I am proud to present the 2020 MDARD ESD Annual Report. It reflects the creativity, flexibility, and industry that are an integral part of the tremendous staff of ESD. I consider myself fortunate to be associated with ESD's hardworking team and all they do to protect consumers, the environment, and the long-term viability of Michigan agriculture.

Jim Johnson
Division Director
Environmental Stewardship Division



Business Unit

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The Business Unit provides 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.

2020 ACCOMPLISHMENTS:

- Rapid transition to remote working capabilities for all ESD staff due to the COVID-19 pandemic.
- Provided financial data and reports to program management within the division for strategic planning.
- Successfully originated and administered 133 grants in 14 different categories.
- Implemented OneSpan electronic signature software with procurement card processing and outgoing grant documents to create time efficiency gains and remote electronic workflows.

Metric	2018	2019	2020
Grants			
Specific types	16	17	14
Originated and processed	186	119	133
Payments processed	716	516	541
Spending Plan			
Appropriation line items	7	7	9
Funds managed – federal	4	4	3
Funds managed – state restricted	5	5	5
Staff Supported	66	66	66
Portion of Budget charged to GF	36.5%	34.5%	25.9%
Office Management			
Computers Refreshed	3	4	12
Smart phone updates	10	35	30

2021 PROGRAM GOALS:

- Continue information management upgrades.
- Develop efficiency gains with the new SIGMA Enterprise software.
- Refine electronic and remote working capabilities.
- Increase cross-training for bench strength.
- Continue professional growth for staff.



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 252 of 1994, as amended



Conservation District Operations

PROGRAM MANAGER: John Switzer | 517-284-5606 | 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. The Michigan Department of Agriculture and Rural Development (MDARD) Conservation Program 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:

The Michigan food and agriculture sector, including the forest product industry, generates more than \$104 billion of total economic activity each year. The sustainable use of our soil, water, and forest resources is critical to ensuring the future of our agriculture and forest products industry. Because 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 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
- Michigan Phosphorus Initiative

2020 ACCOMPLISHMENTS:

- Rewrote the Conservation Districts Operations Manual.
- Development of a five-year strategic plan to prioritize and guide the Conservation Program's work with conservation districts.
- The creation and pilot of a new approach to working with conservation districts to help build operational capacity and provide grant delivery support.
- 193 instances of operational development assistance to conservation districts.
- Certified 29 conservation district elections.
- Grant program delivery support to 55 conservation districts that collectively received nearly \$7 million in grant funding for the delivery of MDARD programs.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
Number of conservation districts	77	75	75	75	75
Number of district managers	73	69	70	70	70
Total district staff	244	199	282	241	282
Number of districts receiving ESD grants	61	62	57	52	55
Total number of ESD grants to districts	124	135	127	94	89
Value of ESD grants to districts	\$5.9M	\$6.2M	\$6.65M	\$8.08M	\$6.9M
ESD grant program progress reviews	323	692*	383	501	417
Conservation district board meetings attended	172	127	163	152	183
Conservation district employee search and selection assistance	44	35	40	27	24
Conservation district capacity building assistance	138	135	52	79	193
District employee development assistance	67	51	36	20	49

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

2021 PROGRAM GOALS:

- Foster the development and expansion of the Michigan Conservation Partnership.
- Survey Conservation Programs staff to identify trainings and skills needed for improved delivery of services.
- Strengthen collaboration within the ESD and MDARD to better meet grantees' needs.
- Finalize training plan and development of additional trainings for conservation district directors and staff.
- Expand pilot of new operations review and grant progress review process statewide.
- Support ongoing efforts to restore operational funding to conservation districts.
- Provide tools and 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: Elizabeth 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 provides the protection of the quality of farmland and natural condition of land and 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 a charitable donation 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 \$104 billion of economic activity generated by Michigan's food and agriculture sector.

2020 ACCOMPLISHMENTS:

- The Conservation Easement Donation Program closed on three new agricultural conservation easements covering 121 acres in 2020.
- The Michigan Agricultural Preservation Fund held an application cycle with \$1.9 million available to local farmland preservation programs. Five grants were awarded to local farmland preservation programs, preserving just under 1,000 acres.
- Another application cycle with \$1.9 million available was held in October 2020 for fiscal year 2021. There are 24 qualified local farmland programs that can submit applications which will be scored and awarded by March 2021.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
New Conservation Easements					
Conservation easements recorded	2	2	8	5	4
Acreage enrolled	87	276	480	668	289
Program Total Conservation Easements					
Conservation easements recorded	131	133	141	146	150
Local conservation easements	11	11	11	11	12
Acreage enrolled	24,815	25,038	25,518	26,186	26,475
Easement Monitoring					
Donated development rights	51	53	61	66	69
State purchase of development rights	50	50	50	50	50
USDA farm and ranch land	21	21	21	21	21
Total	122	124	132	137	140

2021 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: Mark Swartz | 517-284-5605 | swartzm@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 in excess of 3.5 percent of total household income and exempt from some special assessments. Currently, there are 3.3 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.

2020 ACCOMPLISHMENTS:

- Finalized the data sharing agreement with the Michigan Department of Treasury improving the accuracy of landowner information in the Farmland database and speed up the issuing of tax credits.
- Updated request forms to provide more clarity, based on comments from the 2019 customer satisfaction survey.
- Completed the first Farmland Development Rights Solar Panel Agreement which permits the construction and operation of a solar energy generating facility on PA 116 enrolled property and ensures the property will continue to be preserved for agricultural use.
- Updated the retention schedule for Farmland Development Rights Agreements and associated documents to ensure documents are retained and destroyed properly and consistently.
- Developed an Incident Response Plan to set reporting requirements for security breaches and incidents caused from handling, storing, processing, and destroying confidential tax information.
- Farmland database is continuing to be updated with improvements.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
Agreement Request Processing					
Applications submitted	652	569	500	721	529
Transfers	738	1,674	3,219	1,707	824
Extensions	1,457	2,294	2,705	1,666	482
Expirations	199	712	1,630	961	648
Total new or modified agreements	2,725	7,644	9,573	5,937	3,131
Program Participation					
New acreage enrolled	52,160	45,520	40,000	42,340	30,963
Acres expired/released	-	33,112	45,252	22,172	7,696
Tax recapture (\$)	512,726	577,942	736,875	854,687	887,121
Tax credits issued (\$ millions)	53	51	53	60	57
Acreage enrolled (millions)	3.25	3.25	3.24	3.26	3.28
Number of participants	-	-	-	-	31,752

2021 PROGRAM GOALS:

- Review all requests within 60 days of receipt and notify landowners if additional information is needed to complete the processing.
- Process complete requests within 60 days of receiving the request.
- Update the geographic information system data for the five counties that have been mapped and continue to map PA 116 parcels in additional counties.
- Continue working with the Michigan Department of Treasury on process improvements.
- Update program forms and instructions to provide more 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 | 517-284-5606 | 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.

2020 ACCOMPLISHMENTS:

- Conducted 2,021 landowner site visits.
- Referred \$13.4 million in forest management projects for private landowners.
- Completed 68 risk assessments for the Michigan Agriculture Environmental Assurance Program Forest, Wetlands, and Habitat system.
- Completed 74 American Tree Farm Inspections.
- Delivered 190 outreach events targeted to family forest owners, foresters, and loggers.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020
Outreach events	346	337	407	368	398	190
On-site visits to family forest owners	2,012	2,202	2,037	2,007	2,098	2,021
Service referrals to the private sector	837	735	864	1,070	1,129	1,107
Service referrals to the public sector	627	649	663	907	797	907
Service referrals for timber harvest	360	295	335	413	426	360
Estimated value of referrals (\$M)	8.4	9.8	10.1	9.7	11.9	13.4
Acres referred to Qualified Forest	81,875	80,851	77,224	55,409	167,883	71,381

2021 PROGRAM GOALS:

- Increase awareness and enrollment in Michigan’s Qualified Forest Program.
- Diversify program funding through external grants and partnership agreements.
- Finalize and implement a master plan that identifies strategic objectives for the next 10 years.
- Conduct 2,000 on-site visits to forest properties.
- Conduct 2,000 referrals to the public and private sectors.

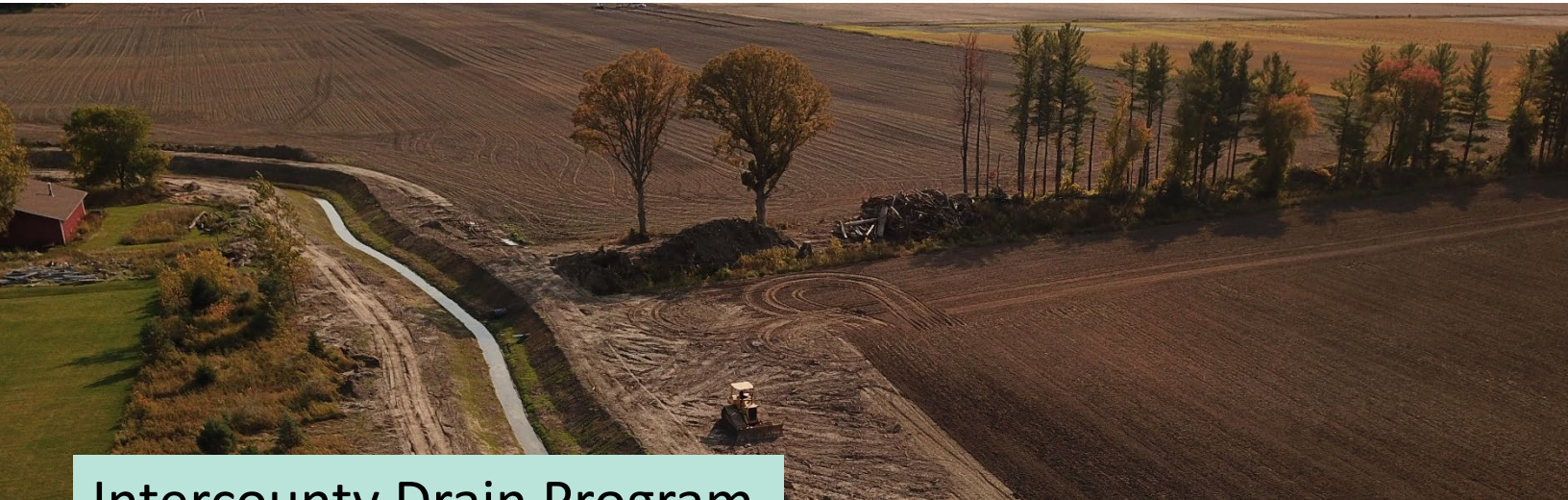


KEY STAKEHOLDERS:

- 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 | 517-284-5622 | 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 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.

2020 ACCOMPLISHMENTS:

- Staff successfully transitioned to remote office locations. They conducted more than 270 virtual drainage board meetings servicing more than 150 intercounty drains for reconstruction, maintenance, and administrative procedures.
- Started a two-year construction project to rebuild the eight miles of dikes and a dam on the Misteguay Creek at a cost of \$8.4 million that was initiated by petition in 2010.
- Sold \$84 million in bonds to finance the rehabilitation of the Northeast Sanitary Pump Station that serves the Oakland-Macomb Interceptor. This Station transports raw sewage from 23 communities with a population of over 830,000 in southeast Michigan. Construction is expected to be completed in 2023.
- Reached substantial completion on a \$44 million reconstruction of the Milk River Retention Treatment Basin. Completion is expected fall 2021.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020
Miles of new or improved drains	122	120	118	104	118	128
Miles of drains maintained	131	233	241	213	229	222
Acres affected	785,000	876,000	857,000	825,000	958,000	1.1M
Public meetings chaired	288	345	439	525	504	460
Project costs	\$92M	\$102M	\$94M	\$96M	\$139M	179 M
Counties served	33	36	41	38	37	46

2021 PROGRAM GOALS:

- Continue the development of a project database to conduct and report program output metrics more efficiently and to implement Lean Process Improvement outcomes.
- Continue progress on the Memorandum of Understanding with State Archivist for the cleaning and digitizing of more than 5,000 current and historic files, and thousands of pages of district maps and construction plans.
- Continue to provide oversight and input to Spicer Group on the development of a spatial database and Geographic Information System of all intercounty drains/districts.
- 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 lead 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.

2020 ACCOMPLISHMENTS:

- 392 new verifications in fiscal year 2020
- 5,764 total new verifications for the program
- Additional accomplishments are detailed in subsequent reports:
 - Conservation Technical Assistance Initiative
 - Phosphorous Initiative
 - Clean Sweep
 - Education
 - Recycling
 - Spill Response
 - Water Monitoring
 - Water Use
 - Aquifer Dispute

MEASURING SUCCESS:

Metric	2018	2019	2020
Verifications	511	533	392
Completed risk assessments	1,678	1,852	1,368
Sediment stabilized (tons)	318,337	414,714	334,983
Phosphorus contained (pounds)	547,049	673,535	551,709

2021 PROGRAM GOALS:

- Implement a new database with a go-live date of February 23, 2021.
- Achieve 500 new verifications and 550 updated verifications for fiscal year 2021.
- Achieve 6,300 total verifications by end of calendar year 2021.



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 \$10.2 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.

2020 ACCOMPLISHMENTS:

- CTAI employees helped to implement 57 different types of conservation practices.
- 1,146 conservation practices were designed or implemented across 47 Michigan counties.
- \$10.2 million was made available for Michigan landowners to implement conservation practices.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
Counties served	44	51	45	46	46
Engineering staff (FTEs)	5	5	5	5	5
Soil conservationists (FTEs)	9	9	9	9	9
Practices designed or implemented	644	625	746	975	1129
Federal cost share	\$6.5 M	\$5.3 M	\$7 M	\$10.8 M	\$10.2 M

2021 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 Phosphorus Initiative

PROGRAM MANAGER: John Switzer | 517-284-5606 | switzerj3@michigan.gov

The Phosphorus Initiative is a cooperative effort between the Michigan Department of Agriculture and Rural Development (MDARD) and the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) to accelerate the implementation of conservation practices that are part of the Great Lakes Restoration Initiative. The objective is to provide technical assistance, conservation planning, practice design and implementation of conservation practices that reduce phosphorus and sediment. The program is funded through a Contribution Agreement between MDARD and NRCS and delivered locally by the Genesee, Hillsdale, and Shiawassee Conservation Districts.

IMPACT FOR MICHIGAN:

Phosphorus loading is a major cause of water pollution and threatens the sustainability of Michigan's food and agriculture industry, which has an impact exceeding \$100 billion annually on the state's economy. This program enhances conservation districts' ability to direct local, state, and federal resources to increase the adoption of voluntary conservation practices by private landowners resulting in reduced soil erosion and protection of topsoil, which reduces phosphorus loading and improves water quality in priority areas.

2020 ACCOMPLISHMENTS:

- Provided 489 landowners with onsite and in-person conservation assistance.
- Developed 140 conservation plans covering 46,703 acres.
- Assisted with the development and implementation of 138 new Farm Bill contracts and the continued implementation and maintenance of 342 existing contracts.
- Delivered more than \$6.5 million in financial assistance to landowners through federal Farm Bill programs.
- All agreement deliverables and accomplishments have been met and exceeded in the final year of this funding agreement for technical assistance.

MEASURING SUCCESS:

Metric	2018	2019	2020
Conservation district technical staff employed	4	4	4
Number of field visits and on-site technical assistance	374	663	489
Number of conservation plans developed	61	125	140
Acres under new conservation plans	30,831	50,667	46,703
Number of new farm bill contracts implemented	79	160	138
Number of existing farm bill contracts maintained	132	296	342
Federal cost share provided	\$901,427	\$3,016,907	\$6,520,780
Field days and outreach events	15	20	10

2021 PROGRAM GOALS:

- Renew/extend the agreement with NRCS to allow for continued, local technical assistance targeting phosphorus and sediment reduction in critical watersheds delivered through conservation districts.
- Support technical staff employed by conservation districts under the Phosphorus Initiative agreement.
- Continue to meet and exceed agreement deliverables in the delivery of on-site technical assistance, development of conservation plans, and assistance on new and existing Farm Bill contracts.



KEY STAKEHOLDERS:

- Michigan landowners
- Federal and state partnering agencies
- Conservation districts

LEGAL AUTHORITY:

- Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 93 (Soil Conservation Districts) 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 satellite collections, in partnership with local health departments and permanent collection sites. Increasing the area and number of people the program can serve. Pesticide disposal costs are covered by the Michigan Agriculture Environmental Assurance Program.

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.

2020 ACCOMPLISHMENTS:

- Oakland County was added as a permanent Clean Sweep county.
- 13 satellite collections were held.
- Collected more than 160,690 pounds of pesticides for proper disposal.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020
Clean Sweep permanent sites	18	18	18	18	17	18
Clean Sweep satellite counties	15	15	19	13	17	13
Pesticides collected (pounds)	173,483	179,470	194,039	184,081	224,922	160,218*
Disposal program costs covered (\$)	207,520	230,610	200,000	230,952	270,845	168,690

* decrease in collection due to COVID-19 related event cancellations.

2021 PROGRAM GOALS:

- Add one additional permanent site.
- Hold 17 satellite collections.
- Collect and dispose of 180,000 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 about 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.

2020 ACCOMPLISHMENTS:

- Held 83 Phase 1 events for farmers across the state.
- Hosted 2,488 farmers at Phase 1 events.
- Enrolled 246 farms that signed up at Phase 1 event.
- Hosted four technician specific trainings.

MEASURING SUCCESS:

Metric	2018	2019	2020
Phase 1 trainings held for farmers	140	155	83
Attendees at Phase 1 events	13,555	6,662	2,488
Farmers/landowners that enrolled in MAEAP	623	533	246
Trainings held for technician	11	6	4

2021 PROGRAM GOALS:

- Restructure training coordination and facilitation.
- Increase training opportunities for technicians.



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 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.

2020 Accomplishments:

- In 2020, a total of 169,856 pounds of empty, properly cleaned pesticide containers were collected and recycled.
- 52 unique agribusinesses and other pesticide end-users participated.
- Over 2.35 million pounds of plastic collected since 1994.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
Pesticide containers recycled (pounds)	103,989	175,316	216,408	280,430	169,856*
Agribusinesses collecting containers	29	43	43	55	52

* decrease potentially due to impacts from COVID-19 following trends in other recycling programs.

2021 PROGRAM GOALS:

- Continue outreach to agribusinesses to increase participation with G. Phillips & Sons LLC services.
- Return to pre-COVID-19 collection levels of more than 200,000 pounds.
- MDARD and the Michigan Department of Environment, Great Lakes, and Energy will implement recommendations from a feasibility study conducted on the collection and recycling of agricultural plastics. This will include a pilot project, in partnership with the Michigan Recycling Coalition, 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 Spill Response

Jack Knorek | 517-243-0072 | knorekj@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 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.

2020 ACCOMPLISHMENTS:

- Responded to and properly mitigated the impacts of eight agrichemical spills.
- 80,680 pounds of spilled products were safely land applied.

MEASURING SUCCESS:

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

2021 PROGRAM GOAL:

- Conduct after-action interviews within two weeks of each incident.



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)

MAEAP Water Monitoring

PROGRAM COORDINATOR: Robert Pigg | 517-284-5611 | piggr@michigan.gov

The Water Monitoring program is the only program in Michigan routinely testing water quality in privately-owned (non-community) water wells. Samples are analyzed for pesticides, volatile organic compounds, and nitrate contamination. Well owners with results indicating a water quality problem are provided with information on risks and steps to take to verify water quality safety. If a groundwater contamination problem is identified, the program works with local landowners to determine the extent and severity of the problem. In some cases, financial assistance can be provided for alternate water supplies.

IMPACT FOR MICHIGAN:

Pesticide contamination of groundwater has been detected at 120 of 5,268 sites sampled by the program in Michigan, or 2.3 percent of the sites sampled. Elevated nitrate levels have been identified at 18 percent of private sites tested for nitrate, and half of these contain nitrates above public drinking water standards. Contaminant concentrations in groundwater indicate the need for improving pesticide and fertilizer management by both homeowners and agriculture.

2020 ACCOMPLISHMENTS:

- Continued work on a privately funded multi-year research study evaluating the impact of the recently-registered pesticide, isoxaflutole.
- Worked with MDARD's Geagley Lab staff to develop protocols for testing water samples for neonicotinoids.
- Continued working with the multi-agency Michigan Water Quality Workgroup.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
EGL or MDARD Analytical Lab Analysis					
Wells sampled	84	94	114	116	61
Pesticide detections	1	3	1	0	0
Pesticide > drinking water standards	0	0	0	0	0
Nitrate elevated between 5 and 10 ppm	5	7	8	10	7
Nitrate over drinking water standard of 10 ppm	5	8	4	8	8
Screening with Test Strips					
Water screenings	932	567	825	778	152
Nitrate elevated between 5 and 10 ppm	44	33	69	59	6
Nitrate over drinking water standard of 10 ppm	67	47	54	39	14
Households Notified of Drinking Water Risks	122	98	136	116	35

2021 PROGRAM GOALS:

- Conduct at least one online and one in-person training on well monitoring procedures.
- Work with state colleagues and supervisors, university researchers, and commodity groups to evaluate monitoring for neonicotinoid pesticides in Michigan groundwater and surface water.



KEY STAKEHOLDERS:

- Domestic well owners and users
- Pesticide and nitrogen fertilizer users
- Pesticide registrants
- Local health departments
- State and federal partner agencies

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 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.

2020 Accomplishments:

- Managed reporting for the 2019 season for 1,912 user accounts, representing 3,649 farms that own or lease water use from more than 10,317 large capacity pumps.
- Worked with the Michigan Department of Technology, Management, and Budget to troubleshoot significant issues with the MILogin portal to the database.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019
Users submitting water use on-line	1,457	1,463	1,430	1,225	1,235
Pumps reported	8,207	8,371	8,637	7,593	6,588
Withdrawal from groundwater (%)	76	77	77	77	77
Withdrawal from surface water (%)	24	23	23	23	23
Irrigated acres reported	566,112	595,576	598,311	512,838	537,769
Water withdrawal (billion gallons)	105	127	129	113	106
Water withdrawal (acre feet)	322,651	385,460	399,490	347,923	326,507

2021 PROGRAM GOALS:

- Overhaul the interface used by agricultural large water quantity user to enter data.
- Increase the number of agricultural water users using the online system to report.



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 Common Law/Riparian Doctrine. The burden of proof in these legal cases can be expensive and lengthy.

2020 ACCOMPLISHMENTS:

- One complaint filed did not meet program requirements.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020
Complaints filed	3	12	1	1
Informally facilitated remedies	0	0	0	0
Resolved/closed conflicts	1	11	1	0
Open complaints	1	1	0	0
Unresolved/disputed complaints	0	0	0	0
Number of invalid complaints	1	2	1	1
Cost to producers for resolution	\$8,000	\$31,590	0	0
Wells replaced or improved	11	11	0	0

2021 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 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



Migrant Labor Housing

PROGRAM MANAGER: Majed Ghussaini | 517-284-5621 | 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.

2020 ACCOMPLISHMENTS:

- Staff worked diligently with program stakeholders to ensure safe inspection and licensing continued while concurrently working on addressing the Michigan Department of Health and Human Services' COVID-19 testing orders and the Governor's Executive Orders. Staff worked with producers to ensure emergency preparedness plans were drafted and posted as well as isolation housing was inspected and approved.
- Staff conducted 1,130 COVID-19 related outreach visits and 145 consultations at licensed housing locations to ensure that COVID-19 Executive Orders were implemented.
- Worked with farms and local municipalities on migrant labor housing and local zoning issues.
- Staff continued to update the electronic inspection system.
- Continued to work with U.S. Department of Labor and other regulatory partners.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020
Applications						
Not opening/rescinded	76	43	200	77	83	94
Opening	798	833	853	871	870	829
Inspections						
Licensing	1,014	1,136	1,132	1,110	1,097	1,059
H2A	157	305	608	752	919	980
CAP-Follow up	357	480	558	510	535	422
Occupancy	718	820	830	843	829	753
Enforcement	3	12	10	2	6	1
Plan Review	84	154	180	111	82	91
Status Check					93	135
COVID*						1,130
Total*	1,934	2,401	2,443	2,236	2,181	3,590
Licensing						
Camps	774	801	811	840	815	830
Units	3,944	4,147	4,046	4,278	4,052	4,062
Capacity	24,100	24,862	25,054	26,166	25,215	26,734

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

2021 PROGRAM GOALS:

- Continue updating and optimizing the electronic inspection system.
- Continue improving model housing plans supporting reduce cost/modular building technologies.
- Continue effort on document management system to automate and expedite licensing.
- Work with partner agencies to understand zoning laws to promote transparent unbiased application of zoning ordinances impacting agricultural labor housing in Michigan.
- Continue working with program stakeholders and local health departments on next year's development and implementation of COVID-19 mitigative measures at licensed migrant housing camps.
- Re-establish Migrant Labor Housing Advisory Board.
- Conduct geographic information system mapping of all Migrant Labor Housing.



KEY STAKEHOLDERS:

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

LEGAL AUTHORITY:

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



Migrant Labor Housing: H-2A Guest Worker Housing

PROGRAM MANAGER: Majed Ghussaini | 517-284-5621 | 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 dollars in farm gate revenue each year.

2020 ACCOMPLISHMENTS:

- Met the growing H-2A demands, including providing 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.
- The Program has absorbed these responsibilities with the same number of staff and no additional funding.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020
Camps	90	135	257	346	437	492
Inspections	157	305	608	752	1,005	1,488
Units licensed	585	870	1,504	1,875	2,085	2,202
Licensed capacity	3,293	4,879	8,880	11,383	13,116	15,401

2021 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 worker program

LEGAL AUTHORITY:

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



Qualified Forest Program

PROGRAM MANAGER: John Switzer | 517-284-5606 | 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 QFP will stimulate more than 900 additional forestry-related jobs, \$195 million in business revenue, and \$44 million in labor income.

2020 ACCOMPLISHMENTS:

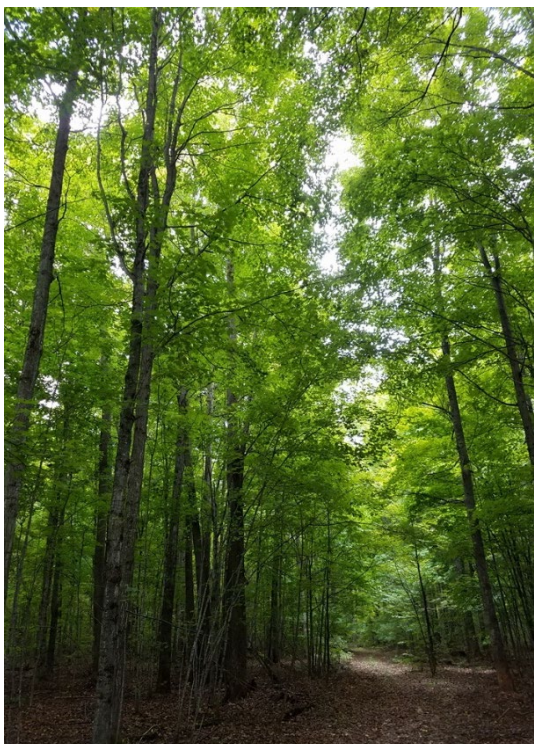
- Enrolled 70,679 new acres, bringing total participation to 736,307 acres.
- Public Act 672 of 2018 increased the limitation of 1.2 million acres of qualified forest property that can be exempted to 2.5 million; eliminated the 640-acre cap on the number of acres that may be enrolled per local unit of government and landowner; clarifying the intent and improving the administration of the program. The legislative changes created 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. Targeted efforts resulted in a 10.5 percent response rate from potential QFP landowners.

MEASURING SUCCESS:

Metric	2015	2016	2017	2018	2019	2020
Applications Submitted	702	704	681	617	614	452
Forest Management Plans Received	647	547	587	546	604	432
Acres from Commercial Forest (DNR)	8,191	1,227	1,772	1,512	1,676	1,266
New Acreage Enrolled	81,875	80,851	77,224	55,409	167,883	70,679
Cumulative Acres Enrolled	299,099	367,593	427,959	483,368	665,628	736,307
Harvested Wood Products (cords)	67,091	381,401	112,298	275,402	93,347	352,339
Harvested Timber Value (dollars)	2,885,998	3,706,610	3,143,995	5,636,097	3,890,722	6,110,208
Revenue Received from 2 Mill Fee	203,142	278,775	342,114	414,437	482,171	660,810

2021 PROGRAM GOALS:

- Increase enrollment in the QFP by 100,000 acres for the 2022 tax year.
- Continuous improvements with QFP database to capture provisions set forth in PA 672, 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 program responds to nuisance complaints involving farms. Program staff evaluate 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.

2020 ACCOMPLISHMENTS:

- Conducted 250 new complaint response investigations.
- Developed new communication materials to help involved parties understand the complaint response process.
- Maintained an average response rate of five business days amidst a pandemic.

MEASURING SUCCESS:

Metric	2017	2018	2019	2020
New complaints received	107	176	193	136
Initial inspections conducted within 7 business days	85%	90%	86%	81%
On-farm investigations	168	251	227	250
Complaint cases closed	88	250	173	127

2021 PROGRAM GOALS:

- Assess customer service through the deployment of surveys.
- Improve customer service and communication through outreach.
- 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 taskforce meetings on each set of GAAMPs provides an indicator of the frequency of use as well as updates needed.

2020 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 October 1, 2020, to receive feedback and input on all draft GAAMPs.

MEASURING SUCCESS:

Review Meetings Held	2015	2016	2017	2018	2019	2020
Manure Management and Utilization	3	2	1	2	2*	3*
Pesticide Use and Pest Control	0	0	0	0	0*	0
Nutrient Utilization	2	0	0	0	0	0
Care of Farm Animals	0	1	1	1	1	1*
Cranberry Production	0	0	0	0	0	0
Livestock Site Selection	5	5	2	4	2	8*
Irrigation Water Use	0	0	0	1	2	0
Farm Markets	0	0	0	0	1	3*

*Committee collaborated remotely or using virtual meeting technologies

2021 PROGRAM GOALS:

- Increase consistency between the GAAMPs documents.
- Continue to improve facilitation of the review process by offering additional trainings, information, and technical support to the review committees.
- Provide greater collaboration through development of annual task chair meeting to review annual timeline, objectives, and consistency.



Generally Accepted Agricultural and Management Practices for Site Selection and Odor Control for New and Expanding Livestock Facilities

January 2020
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.

2020 ACCOMPLISHMENTS:

- Continued Lean Process Improvement initiative, including launch of revised application materials.
- Year-to-date, processed 58 total applications, including eight for livestock production facilities.
- Responded to 51 applications from small/non-livestock operations.
- Proactive reviews approved in 2020 will annually generate:
 - \$80.4 million in economic activity
 - \$14.6 million in earnings for farm households
 - 852 ongoing full-time jobs
 - \$3.98 million in additional tax revenues

MEASURING SUCCESS:

Metric	2014	2015	2016	2017	2018	2019	2020
New Site Selection Requests	58	46	50	49	15	6	8
New facilities	22	13	25	25	7	2	3
Expanding facilities	36	33	25	24	8	4	5
Final Approvals by Species							
Dairy	23	19	10	22	4	2	0
Swine	18	8	20	17	6	7	1
Poultry	7	16	18	9	3	5	3
Beef	6	3	1	0	2	0	0
Other	3	0	1	2	0	0	0
Small/Non-Livestock Reviews	10	37	23	30	49	52	51

2021 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 in submitting 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: 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.

2020 ACCOMPLISHMENTS:

- 68,000 dry tons of biosolids were applied over farmland, with a fertilizer value of \$7.0 million.
- Planned and attended the 2020 Michigan Biosolids Virtual Conference.
- Conducted a demonstration plot at the 2020 Agro Expo.
- Published four Quarterly Amendments Newsletters.
- Displayed at the 2020 Michigan Water Environment Association/American Water Works Association Joint Expo.

MEASURING SUCCESS:

Metric	2016	2017	2018	2019	2020
Biosolids applied (dry tons)	105,000	120,000	65,000	64,000	68,000
Biosolids application area (est. acres)	26,600	29,550	21,500	21,300	26,000
Nitrogen used as fertilizer (est. tons)	4,500	4,800	2,780	2,560	3,750
Phosphorus used as fertilizer (est. tons P ₂ O ₅)	5,290	6,900	3,220	3,170	2,040
Potassium used as fertilizer (est. tons K ₂ O)	456	600	282	278	200
Farm value as fertilizer (approx. N-P ₂ O ₅ -K ₂ O)	\$14M	\$15M	\$8.5M	\$6.4M	\$7.0M
Biosolids Conference Participants	60	0*	105	155	165

*No conference in 2017

2021 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 2020 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.

LEGAL AUTHORITY:

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

KEY STAKEHOLDERS:

- Michigan Water Environment Association
- Michigan Department of Environment, Great Lakes, and Energy
- Michigan Farm Bureau
- MSU Extension
- Michigan Townships Associations
- Conservation districts
- Local crop producers

