



ENVIRONMENTAL STEWARDSHIP DIVISION

2015 Annual Report



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Table of Contents

ESD Contact Information & Mission Statement	2
Business Unit	3
Conservation District Operations.....	5
Michigan Pheasant Restoration Initiative.....	7
Conservation Technical Assistance Initiative.....	9
Intercounty Drains.....	11
Conservation Easement Program	13
Farmland Preservation.....	15
Forestry Assistance Program	17
MAEAP Overview	19
MAEAP Training	21
MAEAP Risk Assessment	23
MAEAP Conservation Practices.....	25
MAEAP Verification.....	27
MAEAP Aquifer Dispute Resolution	29
MAEAP Clean Sweep	31
MAEAP Pesticide Container Recycling	33
MAEAP Residential.....	35
MAEAP Spill Response.....	37
MAEAP Turfgrass	39
MAEAP Water Use Reporting	41
Migrant Labor Housing.....	43
Qualified Forest Program	45
Biosolids	47
Right to Farm Complaint Response	49
Right to Farm GAAMPs Review	51
Right to Farm Livestock Facility Siting.....	53

Michigan Department of Agriculture & Rural Development
ENVIRONMENTAL STEWARDSHIP DIVISION
2015 ANNUAL REPORT



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P.O. Box 30017
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- Physical Address:** Michigan Department of Agriculture and Rural Development
Environmental Stewardship Division
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- Mission Statement:** The Environmental Stewardship Division administers the Michigan Department of Agriculture and Rural Development's many programs that encourage environmentally sound agricultural practices and prevent agriculture-related pollution. ESD seeks to enhance commercial agriculture activities in Michigan, while protecting the environment and public health.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
BUSINESS UNIT – FY15



Manager: Darla Ykimoff, 517-284-5603, YkimoffD@michigan.gov

Legal Authority: Public Act 252 of 1994, Omnibus Budget Appropriations Bill

Description of the Program:

The Business Unit was formed in FY14 to provide centralized office services within the Environmental Stewardship Division. Office services include: budget development and monitoring, timekeeping, office supplies, procurement, travel, payment processing, equipment support, coordination of Freedom of Information Act requests, and performance management scorecards. The Business Unit also provides information management support to ESD and partner programs. The centralized services provided by the Business Unit allow program managers to focus on program implementation and process improvement.

Why It Matters:

- 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 has standardized ESD 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.

Key Stakeholders

- ESD program managers and staff
- MDARD Budget Office
- Accounting Service Center
- Conservation districts
- Other state agencies
- Federal government

Materiality

- > \$15 M total budget
- > \$5 M grants to partner agencies
- 55 FTEs
- 4 restricted revenue sources
- >100 budget programs and indexes tracked

FY15 Accomplishments:

- Completed lean process improvements, developed and/or updated standard operating procedures for MDARD's Operation Excellence.
- Streamlined grant reporting and payment process to conservation districts, with updated document receipt and payment tracking tools.
- Initiated information management improvements in Michigan Agriculture Environmental Assurance Program, Right-to-Farm, and Intercounty Drains Programs.

Measures of Success:

Metric	FY14	FY15
Grants		
Specific types	19	17
Originated and processed	133	108
Payments processed	483	529
Payments made (\$m)	\$5.384	\$5.194
Spending Plan		
Appropriation line items	7	7
Funds managed - federal	4	4
Funds managed - state restricted	5	5
Indexes tracked	96	114
Staff supported	55	55
Portion of budget charged to GF	28.6%	46.6%
Office Management		
Computers refreshed	3	5
Smart phone updates	0	36

Dashboards and Scorecards:

- The Business Unit does not have a separate entry on the departmental scorecard. Efforts are reflected in the scorecards of ESD programs supported by the Business Unit.

FY16 Goals:

- Continue information management upgrades.
- Improve and consolidate grant tracking process.
- Increase cross-training for bench strength.
- Professional growth for staff.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
CONSERVATION DISTRICT OPERATIONS – FY15



Manager: Stephen Shine, 517-284-5606, shines@michigan.gov

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

Description of the Program:

- Michigan's conservation districts are a governmental subdivision of this state utilizing state, federal, and private sector resources to solve today's agricultural and natural resource problems.
- Conservation districts are the primary mechanism by which the Michigan Department of Agriculture and Rural Development delivers “regulatory certainty,” conservation, wildlife habitat, and forestry programs to private landowners.
- Statutorily, MDARD monitors elections, financials, audits, budgets, Freedom of Information Act, and Open Meetings Act requirements. MDARD staff assists with the development of annual plans of work, professional development plans, and coordination of training. It is also common for the MDARD regional coordinators to provide search and selection assistance for foresters and technicians implementing departmental programs.



Why it Matters:

- Michigan's agriculture and forest products industry is a \$117.8 billion sector of the state's economy.
- Conservation programming is most effective when delivered at the local level, by local people, with local technical assistance.
- Conservation districts deliver MDARD programs like the Michigan Agriculture Environmental Assurance Program (MAEAP), Forestry Assistance Program, Conservation Reserve Enhancement Program, and the Habitat Incentive Program.
- Conservation districts also provide for the delivery of Michigan Department of Environmental Quality programs including: watershed planning, recycling, soil erosion and sedimentation control.
- Conservation districts also provide for the delivery of Michigan Department of Natural Resources programs including: Pheasant Restoration Initiative, Hunting Access, Wildlife Habitat, and Invasive Species.

Key Stakeholders

- Michigan's landowners
- Conservation district staff and boards
- Federal and state agencies
- Michigan's natural resources

Key Statistics

- 78 conservation districts
- 57 conservation districts with grants from MDARD
- \$5 million in MDARD grants for conservation
- 37 outreach events with county Farm Bureau offices
- 6 tree farm field days

FY15 Accomplishments:

- 619 MAEAP verifications in 2015
- 2015 Michigan Association of Conservation Districts' annual meeting
- First MAEAP Forest, Wetlands and Habitat System verification
- 81,875 acres enrolled into Qualified Forest Program

Measuring Success:

Metric	FY14	FY15
Conservation Districts	78	78
District manager FTEs	74	73
Staff FTEs	231	239
ESD Work With Districts		
Grants to districts	56	57
Value of ESD grants	\$5M	\$5M
Board meeting participation	156	163
Quarterly financial evaluations	224	228
Search and selection processes	35	32
Board training events	56	68
Staff training events	14	14

Dashboards and Scorecards:

Michigan's dashboards and scorecards were implemented by Governor Rick Snyder to provide a quick assessment of the state's performance in key areas. The dashboards can be found at www.michigan.gov/openmichigan.

FY16 Program Goals:

- Gain National Association of Conservation Districts' "accreditation" for MDARD's conservation district training plan.
- Reach 75 percent of conservation district boards with core training materials.
- Utilize FY15 productivity in FY16 goal setting.
- Initiate strategic plan for Quality of Life/Conservation Cooperation.



Manager: Stephen Shine, 517-284-5606, shines@michigan.gov

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

Description of the Program:

- The Michigan Pheasant Restoration Initiative (MPRI) is a conservation initiative to restore and enhance Michigan pheasant habitat, populations, and hunting opportunities on private and public lands.
- The initiative is implemented through collaboration between the Michigan Department of Agriculture and Rural Development, Michigan Department of Natural Resources, United States Department of Agriculture, and various non-governmental organizations.
- Conservation districts are the primary mechanism by which the Michigan Department of Agriculture and Rural Development delivers the MPRI to private landowners.
- Initiative goals are enhanced through landowner cooperatives of 10,000 acres or more to improve habitat for pheasants and other wildlife on a landscape level.
- MPRI works by acquiring state and federal resources to assist cooperative landowners in improving habitat on selected state game areas, recreation areas, and other public lands.
- Farm Bill programs, like the Michigan Conservation Reserve Enhancement Program and Habitat Incentive Program, provide financial incentives to landowners to restore habitat on their land.



Why it Matters:

- Pheasants rely on high-quality grasslands and agricultural areas for adequate cover and food resources throughout their life. Changes in agriculture practices, urbanization, and reforestation have contributed to their declining numbers. A variety of non-game grassland dependent species also benefit through this initiative. Migratory bird and upland game hunting account for nearly \$72.5 million in retail sales in Michigan, alone.
- Grasslands and wetlands restored through the initiative reduce sediment and nutrient delivery by as much as 75 percent.

Key Stakeholders
<ul style="list-style-type: none"> • Cooperative landowners • Conservation district staff and boards • Agencies partnering with districts to implement conservation programming • Michigan's hunting community, especially pheasant hunters

Key Deliverables
<ul style="list-style-type: none"> • Eight technical staff through districts: <ul style="list-style-type: none"> ✓ 5 Farm Bill biologists ✓ 3 Phosphorus initiative technicians • 3,265 acres of habitat improved • 10 landowner pheasant cooperatives

FY15 Accomplishments:

- Regional Conservation Partnership Program projects in the Western Lake Erie Basin and Saginaw Bay, totaling \$17 million.
- The Habitat Incentive Program enhancing Continuous Conservation Reserve Program participation in the St. Joseph River Watershed provides \$200,000. The program enrolled 145.11 acres in FY15.
- The Hunting Access Program has been awarded a total of \$2,164,299. This money allows the enrollment of 170 properties, covering 20,089 acres.

Measuring Success:

Metric	FY15
Conservation District Totals	
Technical staff employed	8
Districts served	16
Habitat Acreage	
Conservation Reserve Program	178,000
Conservation Reserve Enhancement Program	77,000
State Acres for Wildlife Enhancement	9,000
Agricultural Conservation Easement Program – Wetlands Reserve Enhancement	23,554
Monies awarded - Wildlife Habitat Grant Projects	\$1,152,710
Acres improved - Wildlife Habitat Grants Projects	3,265
Pheasant Cooperatives	10
Hunting Access Program enrollment properties	170
Hunting Access Program enrollment acres	20,089
Farm Bill biologists outreach events	64

Dashboards and Scorecards:

The Michigan Department of Natural Resources maintains a scorecard item measuring the number of Pheasant Cooperatives established, or in the process of being established. The target was 10 cooperatives, and 10 cooperatives exist.

FY16 Program Goals:

- Impact 200,000 acres by restoring or enhancing 25,000 acres of grassland habitat.
- Increase access to quality pheasant hunting on both public and private lands.
- Increase pheasant hunter recruitment and retention by 25 percent by 2020.
- Develop habitat management guidelines and training.
- Develop partnerships to restore wild pheasant populations in suitable habitats in Michigan.
- Monitor populations and conduct research to ensure the best management of the pheasant resource.
- Provide sustainable funding and resources necessary to implement the initiative.
- Enroll up to 85,000 acres in the Conservation Reserve Enhancement Program.
- Restore 1,350 acres of grasslands and wetlands through Habitat Incentive Program.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
CONSERVATION TECHNICAL ASSISTANCE INITIATIVE



Coordinator: Laura Doud, P.E., 517-898-4041, doudl@michigan.gov

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

Description of the Program:

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



Why it matters:

- The engineering and construction oversight provided by CTAI opened a bottleneck in our conservation implementation system, bringing 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 Agricultural Environmental Assurance Program.
- The implementation of these practices spurs the local economy through the purchase of materials and the use of local contractors.

Key Stakeholders

- Farmers
- Natural Resources Conservation Service
- Conservation district technicians
- Conservation and environmental groups
- State agencies

Key Program Statistics

- In operation from 2006 to 2015
- Technical assistance provided for more than 6,500 conservation practices across Michigan
- \$78.6 million in federal cost share dollars made available to Michigan landowners

FY15 Accomplishments:

- CTAI employees provided assistance on approximately 528 practices. These include 35 different practice types in 40 Michigan counties. This work translates to more than \$6.5 million being made available to Michigan landowners by the CTAI Program.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Counties Served	49	44	44	30	40
Engineering Staff (FTEs)	6	6	6	5	5
NRCS Soil Conservationists (FTEs)	12	12	12	7	9
Conservation Practices Implemented	1,039	960	1,168	346	528
Federal Technical Assistance (\$ Million)			1.0		
Federal Cost Share (\$ Million)	11.3	11.0	16.3	5.0	6.5

Dashboards and Scorecards:

- The CTAI Program does not have a dashboard item. The outcomes can be seen in the number of conservation practices implemented under the Michigan Agriculture Environmental Assurance Program, as well as the number of site verifications occurring via that program.

FY16 Program Goals:

- Continue to work with partners to determine the best placement and types of technical assistance needed across the state.
- Fill an engineering vacancy in Kent County.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
INTERCOUNTY DRAINS - FY15



Manager: Michael R. Gregg, 517-284-5622, greggm@michigan.gov

Legal Authority: The Drain Code of 1956, 1956 Public Act 40 as amended, MCL 280.1 et seq

Description of the Program:

Since 1923, the Michigan Department of Agriculture and Rural Development has been responsible, under the Drain Code, to administer the proceedings to establish, improve, and maintain storm drains and sanitary sewers involving lands in two or more counties. Staff serves as deputies for the Director and chair of the drainage board that is required for each drain whose members are the county drain/water resource/public works commissioners of the affected counties. There are approximately 1,100 intercounty drains in Michigan, with an estimated length of over 6,000 miles serving approximately 6 million acres.

Why it Matters:

- 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, and 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. This program facilitates an administrative process to accomplish the movement of water (storm or sanitary) across county and other jurisdictional boundaries that is inclusive and provides due process to all affected interests.



Soils requiring engineered drainage infrastructure to support farming, roads or development – USDA-SCS

Key Stakeholders

- County drain/water resource/public works commissioners
- Agricultural, residential, and commercial property owners
- Local units of government
- County road commissions
- Michigan Department of Transportation

Key Statistics

- 1,100 intercounty drains in 65 counties
- 6,000 miles of open channels and pipes, with appurtenant dams, pump stations, dikes, bridges, and culverts
- 150 – 225 maintenance projects per year
- 15 – 25 ongoing major reconstruction or new drain projects
- 6 million acres of urban, residential and agricultural land drained

FY15 Accomplishments:

- Administered a program record \$92 million in project costs financed by tax exempt bonds and grants supported by special assessments against public corporations and private property benefited.
- Participated with the Michigan Association of County Drain Commissioners (MACDC) in the development of a five year strategic plan which, in FY15, accomplished the adoption of a statewide General Retention Schedule for drain records; the comprehensive review and revision of all legal/procedural documents for county and intercounty drains; and began a process for an interagency implementation of LiDAR based mapping of 15 counties to provide more detailed elevation information.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Miles of new or improved drains	115	145	138	112	122
Public meetings chaired	219	226	206	225	288
Project costs in millions	52.6	67	73	85	92
Miles of drains maintained	136	117	134	142	131
Number of acres affected	811,000	565,000	625,000	736,000	785,000
Number of counties affected	29	33	34	31	33

Dashboards and Scorecards:

- The Intercounty Drains Program does not have an item on the departmental scorecard for FY15. Staff is working with MDARD's Director of Strategy and Business Performance to design measures and develop a database toward this end.

FY16 Program Goals:

- Maintain and improve program resources to sustain current program outputs.
- Continue to facilitate with MACDC expanded LiDAR coverage and development of an NHD drain database.
- Improve the project tracking database to more accurately report program output.
- Collaborate with MACDC and Department of Treasury on updating the Drain Code financial disbursement procedures.

Michigan Department of Agriculture & Rural Development

Environmental Stewardship

CONSERVATION EASEMENT PROGRAM – 2015



Manager: Richard Harlow, 517-284-5627, harlowr@michigan.gov

Coordinator: Elizabeth Juras, 517-243-7949, jurase@michigan.gov

Legal Authority: Public Act 451 of 1994, as amended MCL 324.36101 *et seq* and 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 Sections 324.2140 *et seq.* and Public Act of 1994, as amended MCL 324.36201 *et seq.*

Description of the Program:

- A conservation easement is a voluntary agreement between a landowner and the State of Michigan keeping land available for agricultural or open space uses. Agricultural and open space conservation easements can be established on parcels over 40 acres, provided they are over 50 percent in agricultural use. Land less than 40 acres will be considered based on agricultural quality and productivity. Historically, the Michigan Department of Agriculture and Rural Development has coordinated financial incentives for entering into conservation easements with the United States Department of Agriculture's Farm and Ranchland Preservation Program, State Purchase of Development Rights, and grants to local agriculture preservation fund boards. However, currently only the tax incentives associated with the donation of conservation easements are available. Conservation easements are recorded in local registrar of deeds offices and remain with the land in the event of sale or ownership transfer. The Conservation Easement Program also monitors land use on enrolled parcels to ensure the conditions of the conservation easement are being followed.

Why it Matters:

- Michigan's farmland and open space lands are a finite resource of significant importance to the state's economy through the production of food, fiber, and forest products.
- Predicted reductions in water availability in the Imperial Valley of California and the Ogallala Aquifer in the Central Plains by 2030 will increase the economic importance of Michigan agriculture because of the availability of water in the Great Lakes Basin.
- Much of Michigan's prime farmland and open space can be located in close proximity to densely populated areas where it faces significant development pressure. A conservation easement is one way families can ensure that the land remains in agriculture or open space use for future generations.
- Landowners may itemize the value of the donation as a charitable contribution on their federal income tax. Land covered by a conservation easement is not subject to the uncapping of the taxable value when ownership changes. Landowners of farmland covered by a conservation easement may obtain tax credits when filing their state income tax return.

Key Stakeholders

- Michigan farmers
- Agri-business
- Consumers of Michigan grown food
- Those who enjoy the open space and farmland

Key Statistics

- 129 conservation easements
- 24,758 acres preserved since 1994
- 240 acres average parcel size

2015 Accomplishments:

- The Conservation Easement Program entered into five new agreements covering 656 acres in 2015.
- Staff completed on-site monitoring of 121 easements for prohibited land-use changes.
- One local conservation easement was transferred to the State of Michigan for monitoring and enforcement.
- The Conservation Easement Program obtained conservation easements in three new counties.

Measuring Success:

Metric	2011	2012	2013	2014	2015
New Conservation Easements					
Conservation easements recorded	4	5	3	6	5
Acreage enrolled	265	537	1,012	718	656
Program Total Conservation Easements					
Conservation easements recorded	110	115	118	124	129
Local conservation easements*	11	11	11	11	11
Acreage enrolled	22,288	22,553	23,090	24,102	24,758
Easement Monitoring					
Donated development rights	33	36	39	45	50
State purchase of development rights	48	50	50	50	50
USDA farm and ranch land	19	21	21	21	21
Total	100	107	110	116	121

*Local Conservation Easements are monitored by local governments.

Dashboards and Scorecards:

The Conservation Easement Program has a balanced scorecard item that appears on the division scorecard. The scorecard item measures the program's ability to close on seven conservation easements and complete all conservation easement monitoring on an annual basis. The five new easements and 121 sites monitored represent 71 and 100 percent of our annual scorecard goal respectively.

2016 Program Goals:

- Work with the agriculture community, open space conservancies, and the legislature to establish a sustainable funding mechanism for the program.
- Work on ways to collaborate with the Federal Agricultural Conservation Easement Program.



Manager: Richard Harlow, 517-284-5627, harlowr@michigan.gov

Legal Authority: Public Act 451 of 1994, as amended MCL 324.36101

Description of the Program:

- The Farmland and Open Space Preservation Program (PA 116) preserves farmland from being developed for non-agricultural uses.
- Participating landowners are exempt from some special property tax assessments and may also receive a Michigan income tax credit for property tax in excess of 3.5 percent of household income.
- The minimum parcel size eligible for enrollment is five acres. Parcels between five and 39.9 acres must be at least 51 percent in agricultural production and must produce a gross annual income from farming of \$200 or more per farmed acre.
- To participate, landowners apply to the local government for approval. If approved, the local government sends the application to the State of Michigan for review and approval.
- Lands can be enrolled between 10 and 90 years. Extensions of existing agreements can be as short as seven years.



Why it Matters:

- 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 a year.
- Michigan's food and agriculture sector contributes \$102 billion to the state's economy.

Key Stakeholders

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

Deliverables

- 43,900 active PA 116 agreements
- 3.1 million acres preserved for agriculture
- Property taxes are less of a competitive disadvantage for participating Michigan farmers
- Stability of agricultural infrastructure
- Stimulate economic development associated with food and agriculture

2015 Accomplishments:

- As counterintuitive as it is, PA 116 is funded by tax credits re-paid when farmers take land out of the program. With the successful growth of Michigan agriculture in recent years and improved tax planning by Michigan farmer's, program revenues are now less than ½ of historic averages. PA 116 staff of seven full time employees (FTEs) was reduced to 2½ FTEs during 2014. In 2015, one FTE was added back to the program, bringing the total program staff FTEs to 3½. Given the limited staff, as compared to previous levels, accomplishments focused on doing the best job possible with limited resources.
- Documents continue to be converted into an electronic format, allowing staff to respond to customers' questions in seconds and more productive use of time previously spent searching for paper documents.
- The agreement production processes have been modified, eliminating procedures that are duplicative or unnecessary.
- Improvements to the PA 116 database began in 2015. These improvements will enhance data and document handling procedures used to create and track the implementation of new or modified PA 116 agreements. These improvements will be completed in early 2016.
- Two student interns were hired to assist in document imaging and the elimination of the paper based system for document processing.

Measuring Success:

Metric	2011	2012	2013	2014*	2015
Applications submitted	1,379	643	502	604	529
New acreage enrolled	94,268	44,443	32,437	40,101	34,910
New applications completed in 60 days (%)	97	98	15	0	0
Transfer requests processed	1,363	1,876	1,817	738	687
Extension requests processed	5,440	6,679	3,494	1,170	1,639
Expiration requests processed	210	326	204	17	909
Total new or modified agreements recorded	7,055	8,728	5,420	2,009	3,082
Current processing time delay (months)	2	3	5	14	11
Tax credits issued in previous year (million \$)	41	41	44	39	44

* Dramatic reduction in productivity in 2014 due to staff reductions and time spent on agreement status calls.

Dashboards and Scorecards:

The PA 116 Program has a balanced scorecard item that appears on the Governor's scorecard. The scorecard item measures the program's ability to complete the review of new applications to enroll land in the program within 60 days of receiving the applications. For the past 20 years, staff have met that target over 95 percent of the time. However, with the loss of staff in 2013, the success rate dropped to 15 percent, and in 2014 and 2015, none of the applications were processed within the 60 day period.

2016 Goals:

- Work with the agriculture community, open space conservancies, and the legislature to establish a sustainable funding mechanism for the program.
- Complete a data and document handling procedure for incoming requests to better estimate process delay times for program participants.
- Finalize the data and document handling procedures used to create and track the implementation of new or modified PA 116 agreements to reduce total process time and make the best use of staff.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
FORESTRY ASSISTANCE PROGRAM – FY15



Manager: Stephen Shine, 517-284-5606, shines@michigan.gov

Legal Authority: 2013 Public Act 59, as amended

Description of the Program:

- The Forestry Assistance Program (FAP) is designed to help private forestland owners manage their forests in an economically beneficial and environmentally sound manner.
- Conservation district foresters work with private landowners to increase their understanding of the value of actively managed forest resources and refer landowners to private sector foresters for management plan development, silvicultural practice implementation, timber valuation, and harvests. FAP foresters also work closely with local private sector natural resource professionals to connect them with private forestland owners and provide quality training opportunities.
- FAP foresters promote the development of forest management plans, enrollment into the Qualified Forest Program, and review Qualified Forest Program applications for program eligibility.



Why it Matters:

- Nearly 50 percent of Michigan’s 19 million acres of forestland is owned by non-industrial private forestland owners.
- The forest products industry contributes approximately \$17 billion to the state’s economy annually, with the potential to contribute much more.
- Family forest owners contribute 64 percent of Michigan’s timber supply.

Key Stakeholders

- Non-industrial private forestland owners
- Private sector professional foresters
- Michigan’s forest products industry
- Local units of government
- Forestry, wildlife, and conservation advocacy groups

Key Deliverables

- Provide landowners with private and public sector referrals to natural resource professionals
- Conduct forestry outreach events
- Provide free site visits to landowners to discuss management options
- Assist with enrollments in the Qualified Forest Program

FY15 Accomplishments:

- In FY15, the Forestry Assistance Program saw an increase from 17 foresters covering 42 counties to 20 foresters covering 49 counties.
- Increased the number of site visits from FY14 by nearly 13 percent.
- Provided FAP foresters with training opportunities, including: Certified Tree Farm Inspector, Forest Stewardship Program plan writing, and the Natural Resources Conservation Service's Environmental Quality Incentives Program - Conservation Activity Plan 106, Forest Management Plan training.
- The Michigan Department of Agriculture and Rural Development partnered with the Michigan Forest Products Council to conduct a statistically sound audit of forestry best management practices in the western Upper Peninsula. Consultant Steigerwaldt Land Services, Inc. conducted the audit.

Measuring Success:

Metric	FY13	FY14	FY15
Foresters available (FTEs)	13	17	20
Counties served	31	42	49
Outreach events	195	299	346
Site visits	1,243	1,781	2012
Private sector referrals	424	790	837
Public sector referrals	433	550	627
Timber harvest referrals	193	352	360
Estimated value of referrals (\$M)	4.5	6.1	8.4
Acres referred to Qualified Forest	11,983	53,108	77,049

Dashboards and Scorecards:

- Forestry Assistance Program's MiScorecard metric is a measure of the percent of achievement toward referring non-industrial private forestland owners to professionals in the private sector. The FY15 goal to refer \$6 million in estimated economic activity from private forestlands was exceeded with an estimated \$8.4 million in economic activity being referred. The dashboards and scorecards can be found at www.michigan.gov/openmichigan.

FY16 Program Goals:

- Provide Michigan residents with 2,250 on-site assessments.
- Initiate 1,000 referrals to the private sector for work on private forestlands.
- Augment the program's ability to offer effective, meaningful outreach events to landowners and natural resource professionals that showcase a wide range of topics and attract a variety of Michigan residents.
- Complete 100 Michigan Agriculture Environmental Assurance Program (MAEAP) Forest, Wetlands and Habitat System risk assessments.
- Achieve 50 MAEAP Forest, Wetlands and Habitat System verifications.



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

Legal Authority: Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 82 and Part 87, as amended, and Public Acts 1 and 2 of 2011, as amended

Description of the Program:

The Michigan Agriculture Environmental Assurance Program (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. This partnership of organizations is dedicated to helping Michigan's farmers protect the environment in a manner that is performance based and cost effective. It is a legislated certainty program, with incentives for farmers to become verified under the program. Now in its 15th year, the program continues to grow at an unprecedented rate, thanks to the dedication and commitment of the MAEAP partners.

- Industry and conservation district sponsored training programs provide information to farmers on environmental risks and program benefits.
- Technical assistance helps farmers evaluate their on-farm risk and develop strategies to address identified risks.
- Local, state, federal, and private resources are coordinated to support farmer implementation of conservation practices.
- Once environmental risks have been met, the producer can request third party non-regulatory verification from the Michigan Department of Agriculture and Rural Development.
- MAEAP partners include over 100 agricultural organizations, university, state and federal agencies, local government, and conservation groups. This level of industry participation is unique to Michigan.
- MAEAP also operates Clean Sweep for the disposal of unwanted pesticides, Pesticide Container Recycling, Water Monitoring, Spill Response, and programs for households and golf courses.
- MAEAP is a nationally recognized proactive environmental assurance program serving Michigan's agricultural industry.



Why It Matters:

- Michigan is surrounded by three-quarters of the world's available fresh water. 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 nationally in supporting the Michigan Agriculture Environmental Assurance Program, which is funded primarily by fees on pesticides and agricultural fertilizers.

Key Stakeholders

- Farmers and agri-businesses
- Michigan Farm Bureau
- Commodity groups
- Conservation districts
- Environmental groups
- Michigan residents

Key Statistics

- 104 Phase 1 sessions presented
- 1,752 risk assessments completed
- 7,893 risk reductions implemented
- 623 farm system verifications
- 102 industry groups in active support

FY15 Accomplishments

- The Michigan legislature approved a six year reauthorization of the program including a potential \$700,000 increase in funds to provide more technical assistance, research, grants, and producer education.
- Set a record high for new verifications with 623 completed during the year; a 16 percent increase over FY14.
- Reached 3,048 verifications statewide, a 26 percent increase over FY14.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Training Event Participation			313	317	181
Completed Risk Assessments	779	1,315	1,792	1,549	1,752
Risk Reductions	3,742	6,302	8,429	8,861	7,893
Verifications	143	356	530	535	623
Partner Groups					102
Sediments Stabilized (tons)	204,349	322,231	347,620	357,232	576,248
Phosphorous Contained (tons)	340,451	552,223	592,197	572,139	947,309

Additional details on all metrics provided in supplemental annual reports covering: training, risk assessments, conservation practices, verifications, partnerships, Clean Sweep, Spill Response, Container Recycling, and Water Monitoring.

Dashboards and Scorecards:

- MAEAP system verifications were published on the FY15 MiScorecard Performance Summary. While MAEAP is about much more than verification, this metric demonstrates the number of those reaching a performance peak. The program passed 51 percent of its October 2011 to December 2020 goal of 6,000 verifications. For FY16, MAEAP metrics have been updated to provide a monthly update on progress toward meeting verification goals for the year. The dashboards and scorecards can be found at www.michigan.gov/openmichigan.

FY16 Program Goals:

- Complete 720 new verifications.
- Complete 125 re-verifications.
- Improve program ability to capture information on education, risk assessments, conservation plan development, and practice implementation.
- Implement a “tiered” system for MAEAP to recognize producer’s involvement in the program prior to achieving verification.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
MAEAP TRAINING – FY15



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

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

Description of the Program:

- 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 I training event. These local and statewide events provide farmers with information on participation in MAEAP, as well as associated environmental and risk mitigation topics.
- Phase I events are offered by MAEAP partners and technicians. On-line training is also available.
- MAEAP partners with other organizations holding educational events for farmers to provide additional training and opportunities for farmers to satisfy the program's Phase 1 requirement.
- The program also coordinates training for the conservation district technicians providing services to farmers covering MAEAP risk assessment tools and conservation practice implementation. Topics cover water and soil protecting practices in each of the four systems.
- Technicians also attend conferences, seminars, and field demonstration days to gain additional skills that help them provide improved technical assistance to farmers.



Why It Matters:

- Awareness is the key first step in motivation.
- Links farmers with technical assistance available through conservation districts.
- Covers -environmental practices allowing farmers to qualify for continuing education credits for pesticide use licenses.

Key Stakeholders

- Farmers
- MAEAP technicians

Key Statistics

- 104 Phase I farm training events
- 8,425 farmers exposed to program
- 11 technician training events
- 181 technicians participating

FY15 Accomplishments

- Set record with 104 Phase 1 events.
- Established training committee to review and improve effectiveness of training events.
- Partnered with new groups to provide more effective, targeted trainings.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Phase I Events for Farmers	44	70	84	93	104
Sponsored by MAEAP partners	25	46	55	61	82
Sponsored by MAEAP technicians	19	24	29	32	22
Total participants	1,752	4,063	8,096	6,389	8,425
MAEAP Technician Training					
Events completed			18	18	11
Total participants			313	317	181
Total hours of training provided			2,629	2,094	1,531

Dashboards and Scorecards:

- The MAEAP training effort did not have an item on the departmental scorecard for 2015. Its accomplishments are integrated with those of the technicians and participating farmers. Staff is working with the Michigan Department of Agriculture and Rural Development's Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

Improve program ability to capture training event participation through development and implementation of a confidential information management system that meets technician and program needs.



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

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

Description of the Program:

- The Michigan Agriculture Environmental Assurance Program (MAEAP) is a nationally recognized proactive environmental assurance program serving Michigan’s agricultural industry.
- The second phase in MAEAP participation is typically working with a technician to conduct a confidential on-site risk assessment.
- The risk assessments help identify environmental concerns associated with farmstead sites, crop production, and livestock production. These are known as Farm*A*Syst, Crop*A*Syst, and Livestock*A*Syst respectively. Specialized risk assessments are also available for fruit, nursery, forestry, and other specific crops.
- While conducting risk assessments, farmers and technicians develop a list of changes the farmer could implement to reduce risks and improve operating procedures. This list provides a plan of action for the farmer and the technician. The farmer can then choose to implement changes on a schedule that suits their abilities and resources.



Why It Matters:

- Study after study has identified technical assistance as the key factor in promoting the adoption of conservation practices. Technicians provide a fresh set of eyes that identify previously unseen environmental risks and value-added knowledge of how to address those risks.
- MAEAP allows the state to leverage millions of federal cost-share and grant dollars for certain practices, such as proper fuel storage and nutrient management planning. More information on this is available in the annual reports for Conservation Practices and Conservation Technical Assistance Initiative.

<p>Key Stakeholders</p> <ul style="list-style-type: none">• Farmers• Agriculture industry groups,• Michigan Farm Bureau• Commodity groups• Conservation districts• State and federal agencies

<p>Key Statistics</p> <ul style="list-style-type: none">• Michigan leads the nation in on-farm risk assessments with over 7,350 conducted over past five years.• Most farmers complete two - three assessments and make an average of 34 changes as a result.

FY15 Accomplishments

- Almost 7,900 risks remediated on farms.
- Trained foresters and MAEAP technicians on the new Forest, Wetlands and Habitat A*Syst, preparing them for implementation of the FWH system in FY16.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Technicians Available	16	21	29	36	36
Completed Risk Assessments					
Farm*A*Syst	384	553	766	714	708
Crop*A*Syst	238	372	551	586	606
Livestock*A*Syst	85	230	309	291	290
Fruit*A*Syst	53	75	105	98	101
Greenhouse, Nursery, Other	20	82	58	64	47
Risk Assessment Total	780	1,312	1,789	1,753	1,752
Risk Reduction Totals	3,742	6,302	8,429	8,796	7,893

Dashboards and Scorecards:

- The MAEAP risk-assessment effort did not have an item on the departmental scorecard for FY15. These accomplishments are integrated with technicians and participating farmers. Staff is working with the Michigan Department of Agriculture and Rural Development's Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

- MDARD regional coordinators working with local workload planning committees to identify impediments and increase the number of risk assessment completed by technicians.
- Provide a database tool by FY17 that technicians can use to support their confidential work with farmers by providing real-time ability to demonstrate the effect of practice changes on the farm.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
MAEAP CONSERVATION PRACTICES – FY15



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

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

Description of the Program:

- The Michigan Agriculture Environmental Assurance Program (MAEAP) is a nationally recognized proactive environmental assurance program serving Michigan's agricultural industry.
- Following completion of a risk assessment and identification of conservation practices, farmers and MAEAP technicians work together to reduce environmental risks.
- Conservation practices are designed to be cost-effective, address identified risks and are consistent with applicable environmental regulations and agency standards.
- Technicians are trained and knowledgeable about practice implementation, available contractors and resources, and federal program assistance making it easier for the farmer to implement the changes. Practices include structural changes, like closing abandoned wells and installing drainage tile management structures, as well as management changes, like pesticide sprayer calibration, manure analysis, and nutrient management plan implementation.



Why It Matters:

- Reduces risks, and thus potential liabilities, for farmers.
- Not every farm reaches the high standards for MAEAP verification, however, farms and the environment both benefit from reducing on farm risks.
- MAEAP allows the state to leverage millions of federal cost-share and grant dollars for certain practices, such as proper fuel storage and nutrient management planning, bringing more farmers into compliance with recommended guidelines and state and federal regulations. This benefits both the farmer and the local economy.

<p>Key Stakeholders</p> <ul style="list-style-type: none">• Farmers• Conservation districts• Conservation and environmental groups• State and federal agencies• Michigan citizens; current and future
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<p>Key Statistics October 2012-September 2015</p> <ul style="list-style-type: none">• 846,900 acres managed under nutrient management plans• 2.09 million pounds of phosphorous kept out of water supplies• Over 356,000 acres in conservation tillage• 1.27 million tons of sediment reduced

FY15 Accomplishments

- Increased acres of farmland with an implemented nutrient management plan by 65 percent.
- Increased cover crop acreage by 25 percent.
- Increased acreage covered by a pest management plan by 27 percent.
- Set records for Nitrogen, Phosphorous, and sediment loss reductions to the environment.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Conservation Practices Implemented	3,742	6,302	8,429	8,796	7,893
Estimated Decrease in Loss to Environment					
Nitrogen (pounds)	746,126	1,282,118	1,353,505	1,171,532	2,015,395
Phosphorous (pounds)	340,451	552,223	592,197	572,139	947,309
Sediment (tons)	204,349	322,231	347,620	357,232	576,248

Dashboards and Scorecards:

- Risk reduction practice implementation is under the control of voluntary program participants and dependent on weather, economic, and business considerations. As such, MAEAP reports these benefits rather than controls them.

FY16 Program Goals:

- The annual plan of work for MAEAP technicians includes providing assistance to farmers to implement conservation practice changes on their farm.
- MAEAP will be developing a tiered system offering participating producers recognition for implementing their improvement plan as they work towards verification.
- Improve program ability to capture information on education, risk assessments, conservation plan development, and practice implementation.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
MAEAP VERIFICATION – FY15



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

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

Description of the Program:

- The Michigan Agriculture Environmental Assurance Program (MAEAP) is a nationally recognized proactive environmental assurance program serving Michigan’s agricultural industry.
- Once a farmer has completed the conservation and management practices identified for environmental risk on their farm, they can request third party verification of environmental compliance by Michigan Department of Agriculture and Rural Development staff. This is known as the Phase III process.
- Farms can be verified in several “systems,” Farmstead, Cropping, Livestock or Forestry, corresponding to the risk assessment tools used by MAEAP technicians.
- The MAEAP systems committees establish verification standards for each system to keep up with the changes to laws and environmental standards, as well as address new issues that arise.
- If a farm is found to be in conformance with verification standards, they are verified in that MAEAP system(s). Provided the farm continues to meet MAEAP standards, verification is good for five years before reverification with MDARD is required.



Why It Matters:

- Farmers demonstrate their environmental efforts to the public by having the MAEAP sign on their farm.
- In the event of a spill or other discharge, an emergency plan is in place to act quickly to address and reduce impacts to soil and water.
- Potential insurance benefits for reduced operating risks on the farm.
- Commodity organizations utilize MAEAP as their sustainability program.
- Competitive advantage for verified farms doing direct marketing of their product.

Key Stakeholders

- Farmers
- Ag industry groups
- Farm Bureau
- Commodity groups
- Conservation and environmental groups
- State and federal agencies

Key Statistics

- More than 3,000 total verifications
- Over 1,300 reverifications
- 84% retention rate of MAEAP farms

FY15 Accomplishments

- During FY15, MAEAP crossed the halfway point toward reaching its goal of 5,000 verifications.
- Set a record high for new verifications with 623 completed during the year.
- Set a record for combined new verifications and reverifications at 995.
- Set a record for single year new verifications in every system of MAEAP.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Total New Verified Farms	143	356	530	535	623
Farmstead	52	121	193	201	239
Cropping	20	158	264	256	286
Livestock	71	77	73	78	98
Total Reverifications	136	192	230	199	372

Dashboards and Scorecards:

- MAEAP system verifications were published on the FY15 MiScorecard Performance Summary. The program achieved 51 percent of its October 2011 to December 2020 goal of 6,000 verifications. For FY16, MAEAP metrics have been updated to provide a monthly update on progress toward meeting verification goals for the year. The dashboards and scorecards can be found at www.michigan.gov/openmichigan.

FY16 Program Goals:

- Complete 720 new verifications.
- Complete 125 reverifications.
- Update data management system to reflect change in reverification time requirement from three years to five years.
- Improve program ability to capture information on education, risk assessments, conservation plan development, and practice implementation.



Coordinator: Abigail Eaton, 517-284-5612, eatona@michigan.gov

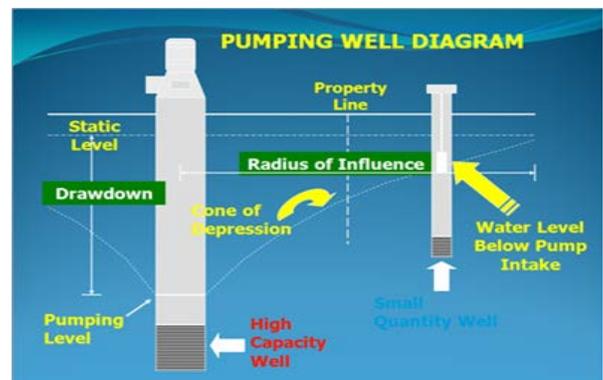
Legal Authority: Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 317, as amended

Description of the Program:

- The Aquifer Dispute Resolution Program allows small quantity well owners to file complaints with the Michigan Department of Environmental Quality or the Michigan Department of Agriculture and Rural Development if their wells fail to furnish their normal water supply or provide potable water. Agricultural related complaints are investigated by MDARD. The Aquifer Dispute Resolution Program was reinstated on June 28, 2013.
- A high capacity well is one or more wells associated with industrial or processing facilities, irrigation facilities, farms, or public water supply systems that are capable of pumping 100,000 gallons of groundwater per day (70 gallons per minute or greater).
- The investigation by the MDEQ or MDARD is intended to find out 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 equitably resolve the dispute. If MDARD fails to resolve the dispute, MDARD will issue an order to the responsible party, declaring a “groundwater dispute.”

Why it Matters:

- Establishes a process for small quantity well owners to file a complaint to the State of Michigan to investigate when they feel their water supply has been compromised by drawdown from a high capacity well(s).
- Without the program, the only recourse is through the courts under Common Law/ Riparian Doctrine. The burden of proof can be expensive and lengthy.
- Establishes new parameters allowing all to enjoy a safe and plentiful water supply into the future.



Key Stakeholders

- Small capacity drinking water well owners
- Large capacity irrigation well operators
- Private well drillers and pump installers
- Michigan Department of Environmental Quality

2015 Accomplishments:

- No formal complaints were filed in 2015. The number of complaints often reflects annual precipitation in a region and the resulting need for increased withdrawals of water for irrigation. The year 2015 had good winter snowpack and year around precipitation.
- Several inquiries were received by MDARD and MDEQ about the program. Homeowners are always encouraged to approach a producer with their concerns before filing a complaint.
- MDARD facilitated a solution informally with one producer and his well driller to address the concerns of one neighboring homeowner regarding the loss of household water during irrigation operations. The resolution included the producer paying to improve the impacted homeowner's well by installing a new well pump with a deep well adaptor kit and new section of pipe to lower the intake 52 feet. The cost to the producer was \$1,700.

Measuring Success:

Metric	FY14	FY15
Complaints filed	0	0
Informally facilitated remedies	0	1
Resolved/closed conflicts	0	1
Open complaints	0	0
Unresolved/disputed complaints	0	0
Number of invalid complaints	0	0
Cost to producers for resolution (\$)	0	1,700
Wells replaced or improved	0	1

Dashboards and Scorecards:

- The program did not have an item on the departmental scorecard for FY15. Staff is working with MDARD's Director of Strategy and Business Performance to design measures toward this end.

2016 Program Goals:

- Improve the Aquifer Dispute Resolution tracking database.
- Train more staff as back-up to respond to Aquifer Dispute Resolution related complaints.
- Continue to work with MDEQ to develop better methods of obtaining information on potential drawdown impacts of large quantity withdrawals (requires Geographic Information System).

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
MAEAP CLEAN SWEEP – FY15



Contact: Abigail Eaton, 517-284-5612, eatona@michigan.gov

Legal Authority: Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 87 (Groundwater and Freshwater Protection)

Description of the Program:

- 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 a key to program success.
- The state's conservation districts provide technical assistance by arranging special collection events in areas not typically served, expanding the reach of some permanent sites.
- Pesticide disposal costs are covered by the Michigan Agriculture Environmental Assurance Program.
- The Michigan Department of Agriculture and Rural Development and the Michigan Department of Environmental Quality maintained a memorandum of understanding (MOU) taking advantage of the successful partnership and structure of Clean Sweep to facilitate the collection and disposal of mercury, concurrent to collecting pesticides. As of FY15, the funding for this MOU has been expended and will no longer continue.



Why it Matters:

- Proper disposal of unused and unwanted pesticides can be costly for individual farmers and other pesticide users. Clean Sweep offers an opportunity to eliminate human health and environmental risks at no cost to citizens. Participants can feel relief as they leave the collection site knowing their family will no longer be exposed to these products, no longer pose an environmental risk, and their unwanted pesticides will be properly disposed.

Key Stakeholders

- Pesticide and nitrogen fertilizer users
- Farmers and homeowners
- Turfgrass industry
- Michigan agri-businesses
- Greenhouse industry
- Local hazardous waste programs

Key Deliverables

- 18 permanent collection sites
- 15 satellite collections in other communities
- \$200,000 in disposal costs covered
- 2.3 million pounds of pesticides collected and disposed to date
- Peace of mind for participants

FY15 Accomplishments:

- Clean Sweep collection levels were consistent with FY14 and ahead of the three previous years.
- Rolled out a new online pesticide collection database for improved reporting to partners.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Clean sweep permanent sites	16	18	18	18	18
Pesticides collected (pounds)	120,014	136,277	127,481	176,970	173,483
Mercury collected (pounds)	1,500	1,952	1,858	853	423
Disposal program costs covered (\$)	220,380	199,684	196,956	240,859	207,520

Dashboards and Scorecards:

- Clean Sweep provides quarterly updates on the volume of pesticides collected to date in comparison to its annual goal. Measures lag behind the goal through the early part of the fiscal year as most collections are held seasonally between May and October, and there is a delay in invoicing. Sites holding year-round collections often wait for volumes to accumulate before scheduling vendor pick-up and disposal.
- Over 173,000 pounds of pesticides were disposed, exceeding the annual goal of 120,000 by the end of FY15 by 44 percent. The dashboards and scorecards can be found at www.michigan.gov/openmichigan.

FY16 Program Goals:

- 15 satellite collection events coordinated with permanent collection sites in interested counties.
- 120,000 pounds of pesticides collected and properly disposed.



Coordinator: Abigail Eaton, 517-282-5612, eatona@michigan.gov

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

Description of the Program:

- The Michigan Department of Agriculture and Rural Development the Michigan Agri-Business Association, the Ag Container Recycling Council (ACRC) and Container Services Network have formed a partnership designed to promote the proper cleaning and recycling of pesticide containers.
- Information on proper container rinsing techniques and recycling locations is distributed by the partnership to pesticide users.
- A network of agri-businesses and conservation districts is 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.
- This program is driven by a contract between ACRC and the vendor, Container Services Network. A number of agri-businesses, including Crop Protection Services, now have their own in-house recycling efforts, which are not reported to MDARD. Crop Production Services accounted for 22 additional collection sites in previous years.

Why it Matters:

- Reduces environmental and human health risks by promoting safe container rinsing practices.
- Decreases the likeliness that unclean or improperly stored containers will leach pesticide residue into the environment.
- Allows plastics to be recycled or converted to other beneficial uses rather than taking up valuable landfill space.



Key Stakeholders

- Agricultural pesticide and fertilizer users
- Turfgrass industry
- Michigan agri-businesses
- Greenhouse industry
- Conservation districts
- Ag Container Recycling Council

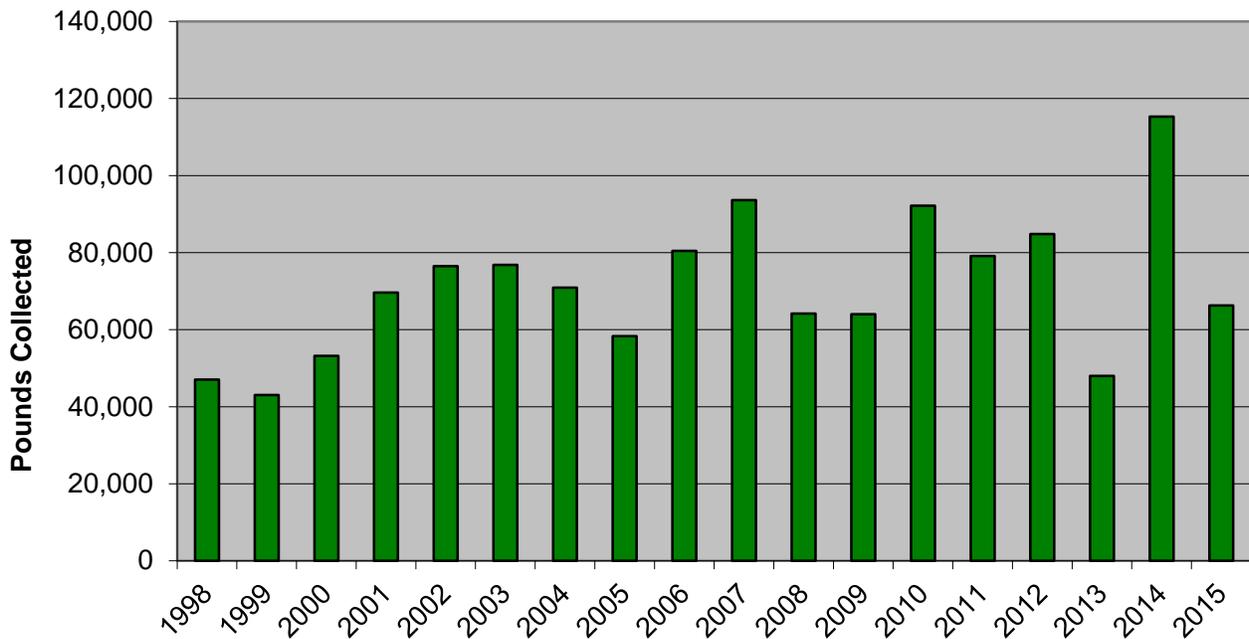
Key Deliverables

- 23 agribusinesses participating as collection sites
- 1.6 million pounds recycled since 1993
- Freeing up limited landfill space

FY15 Accomplishments:

- In FY15, Clean Tide, the Michigan-based subsidiary of IBC North America in Clarkston, was sold and redefined their business model which no longer includes participation in the program. American Recycling, in Grand Traverse County, switched to incineration of incoming plastic for co-generation and can no longer be counted as recycling. It should be noted that several thousand pounds of producers' plastic that would normally have been counted in the Michigan effort were diverted to this latter facility.
- A total of 66,281 pounds of empty, properly cleaned pesticide containers collected and recycled in 2015.

Measuring Success:



Dashboards and Scorecards:

- The Pesticide Container Recycling Program did not have an item on the departmental scorecard for FY15. Collection numbers reported to MDARD only reflect efforts of this state/industry/producer partnership. They do not include pesticide container recycling efforts by agribusiness in their entirety, which is much larger.

2016 Program Goals:

- MDARD will work with Container Services Network of South Carolina, and American Recycling to coordinate recycling and quantity reporting efforts.
- MDARD will identify additional potential options for producers to recycle empty, clean pesticide containers, especially in hard to service areas of the state.



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

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

Description of the Program:

- The Michigan Water Stewardship Program (MWSP) encourages Michigan residents to be more aware of the water around them, how they impact it, and what steps they can take to improve water quality.
- Technical assistance is delivered to residents through a web-based interactive program designed to assist adoption of stewardship practices that reduce environmental risks to water and other related natural resources through education and outreach materials.
- The MWSP is voluntary, locally driven, and funded through fees assessed on sales of pesticides and fertilizers.



Why It Matters:

- A significant portion of the fertilizers and pesticides applied each year in Michigan are bought and applied by residential property owners. It's important to reach out to them with educational materials on how to use these products wisely.
- Much of the land in Michigan is owned by private individuals with no ties to agriculture. It wouldn't be possible to protect land and water resources properly without their participation. The MWSP is one tool addressing this issue.
- Young people in Michigan are increasingly removed from the natural environment. It's important to teach them about the natural resources of our state and region, and how to protect and preserve them. The MWSP helps us do this.

Key Stakeholders

- Residential users of pesticides and fertilizer
- Residential youth
- Educators statewide
- Conservation districts
- Agencies working on water quality issues

Key Statistics

- Over 1,000,000 domestic wells in Michigan, more than any other state.
- More than 52,000 visits to the MWSP website since 2011.
- Michigan residents have visited the site about 16,000 times since 2011.

FY15 Michigan Water Stewardship Program Accomplishments:

- The interactive website, www.MiWaterStewardship.org, is continuing to expand with more free online courses, activities for students and youth, and teaching resources for educators.
- Approved and uploaded environmental videos.
- Approved and uploaded educator resources such as handouts, brochures and presentations.

Measuring Success:

Metric	FY11	FY12	FY13	FY14	FY15
Michigan Residents Using Website	1,259	1,628	2,337	3,061	2,883
Non-Michigan Residents Using Website	599	5,969	9,907	15,259	26,114
Total Users	1,858	7,597	12,244	18,320	28,997

Dashboards and Scorecards:

- The MAEAP Residential effort did not have an item on the departmental scorecard for FY15. Staff is working with the Michigan Department of Agriculture and Rural Development’s Director of Strategy and Business Performance to design measures toward this end.

Program Goals:

- Expand adult usage of the site through researching and adding homeowner specific videos and other low impact development techniques.
- Pilot a watershed outreach program in the Middle Grand River Watershed to encourage residents to commit to making changes to better protect water quality.



Coordinator: Jack Knorek, 517-243-0072, knorekj@michigan.gov

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

Description of the Program:

- The Spill Response Program provides technical assistance for agri-chemical 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 Spill Response line at 800-405-0101.
- An agreement between MDARD and the Michigan Department of Environmental Quality allows for MDARD to take the lead in the state’s response to agri-chemicals and manure.
- This voluntary program allows agricultural producers to minimize or eliminate environmental contamination resulting from a spill incident.



Why it Matters:

- 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.

Key Stakeholders

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

Key Statistics:

- 180,000 pounds of pesticides
- 615,000 pounds of fertilizers
- 1.2 million pounds of manure

FY15 Accomplishments:

- Enhanced environmental protection.
- Continuing trust between Michigan’s agricultural community and MDARD.
- Stronger working relationship between MDARD and MDEQ.

Measuring Success:

Metric	2011	2012	2013	2014	2015
Spill Incidents Reported	14	12	11	7	17
Types of Spills					
Agricultural	9	5	5	2	11
Lawn care	5	7	6	5	6
Materials Spilled					
Pesticides (pounds)	9,500	11,305	350	40,100	1,550
Fertilizer (pounds)	35,000	36,000	5,000	250	2,350
Manure (pounds)	45,000	135,000			80,000
Material Disposal					
Agronomic application	89,000	182,205	5,350		80,000
Landfill - incinerate	500	100		40,350	3,900

Dashboards and Scorecards:

- The Spill Response Program did not have an item on the departmental scorecard. Staff is working with MDARD’s Director of Strategy and Business Performance to improve metrics and design measures toward this end.

FY16 Goals:

- The Spill Response Program will have MDARD staff at the scene of an incident within four hours of any notification requiring a physical presence.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
MAEAP TURFGRASS – FY15



Manager: Joe Kelpinski, 517-284-5608, kelpinskij@michigan.gov

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

Description of the Program:

- The Michigan Turfgrass Environmental Stewardship Program (MTESP) is a voluntary, proactive initiative designed to protect groundwater and surface water resources by advancing turfgrass management practices, preventing pollution, and increasing regulatory compliance within the golf industry.
- The program provides on-site visits and workshops providing compliance assistance, technical assistance, pollution prevention and “green” purchasing information.
- MTESP is intended to organize efforts of the turfgrass industry, state agencies, Michigan State University, and environmental advocacy groups to advance the environmental stewardship of the turfgrass industry and to recognize environmental achievements.



Why It Matters:

- The program identifies state and federal laws affecting the golf industry related to drinking water and irrigation wells, fuel storage, pesticides and fertilizers, and emergency response plans.
- The MTESP has been used as a model for other voluntary, industry-based environmental programs in Michigan.
- There is strong interest in expanding this program into additional segments of the green industry by the Michigan Sports Turf Managers Association, professional lawn care companies, parks, and municipalities.

Key Stakeholders

- Michigan Turfgrass Foundation
- Michigan State University
- Michigan Dept. of Environmental Quality
- Michigan Golf Course Owners Association
- Golf Association of Michigan
- Michigan Golf Course Superintendents Association

Key Statistics

- Michigan turfgrass encompasses 1.89 million acres
- 286 participating golf properties.
- 85 golf properties certified by the program.

FY15 Accomplishments:

- Promoted MTESP activities at the 2015 Michigan Turfgrass Conference.
- Completed updating the underground storage tank rules in the MTESP electronic workbook to reflect recent changes in federal regulations.
- Continuing demonstration plots research to look at nutrient and sedimentation runoff.

Measuring Success:

Metric	FY14	FY15
Workshops provided	4	5
Workshop participation	317	307
On-site visits	1	10
Participating courses	255	286
Total certified courses	75	85

Dashboards and Scorecards:

- The MAEAP Turfgrass Program did not have an item on the departmental scorecard for FY15. Staff is working with the Michigan Department of Agriculture and Rural Development's Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

- Refine and update the online training tool designed to reduce the environmental impact of the golf industry on water quality.
- Pursue incentives for assessment completion and certification, and to increase initial participation and continuing participation in the program.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
MAEAP WATER USE REPORTING – 2015



Coordinator: Abigail Eaton, 517-284-5612, eatona@michigan.gov

Legal Authority: Natural Resources and Environmental Protection Act, Public Act 451 of 1994, Part 327, as amended

Description of the Program:

- 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 Environmental Quality for a fee.
- Water users are required to submit their annual reports to the State of Michigan by April 1 of the following year.

Why it matters:

- On December 13, 2005, the Great Lakes Governors and Premiers signed Annex 2001, implementing agreements to provide unprecedented protections for the Great Lakes-St. Lawrence River Basin. These agreements include a ban on new diversions of water outside the Basin with limited exceptions, and were approved by the Governors of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, and the Premiers of Ontario and Québec.
- Annex 2001 stipulates that within five years of the effective date of the Compact (enabling legislation passed in all Great Lakes States and ratified by Congress), 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 the Compact.



Key Stakeholders

- Agricultural large quantity water use operations
- State governors and premiers of Canadian provinces in the great lakes basin
- Great Lakes Commission
- International Joint Commission

Key Deliverables

- Processed water use information from agricultural operations with large capacity water withdrawals.
- Yearly report was submitted to MDEQ for integration with non-agricultural water use information that is submitted to the Great Lakes Commission.
- Promoted sound management of water resources within Great Lakes Basin.

2015 Accomplishments

- Managed reporting for approximately 1,778 user accounts, representing 3,440 farms reporting water use for more than 9,400 large capacity pumps.
- Worked with the Michigan Department of Technology, Management and Budget to complete an MDARD interface to water withdrawal data submitted by landowners that allows better customer service and improved data reliability.
- Reduced redundancy of records for streamlined tracking.

Measuring Success:

Metric	2012	2013	2014
Users submitting water use on-line	1,478	1,416	1452
Pumps reported	7,469	7,579	7,996
Withdrawal from groundwater (%)	74	76	77
Withdrawal from surface water (%)	26	24	23
Irrigated acres reported	592,243	533,160	553,889
Water withdrawal (billion gallons)	175	109	98
Water withdrawal (acre feet)	457,300	333,183	302,120

Dashboards and Scorecards:

- The Water Use Reporting program did not have an item on the departmental scorecard for 2015. Staff is working with MDARD's Director of Strategy and Business Performance to design measures toward this end.

2016 Program Goals:

- Improve the Water Use Reporting Program's online reporting database to increase efficiency in tracking transfers of ownership and/or leasing of large quantity withdrawals, reduce duplication potential of records, and strengthen the capability of reporting results at the state level.
- On-going work with MDEQ to identify producers with new and old large quantity water withdrawals who are not yet submitting required water use reports to the State of Michigan, and assist to bring those users into compliance.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship Program
MIGRANT LABOR HOUSING - 2015



Manager: Majed Ghussaini, 517-284-5621, ghussainim@michigan.gov

Legal Authority: Public Health Code, Public Act 368 of 1978, Part 124, as amended

Description of the Program:

- Migrant labor housing is typically provided by farmers and farm labor contractors who need migrant workers to harvest or process their crops. Thirty-eight of Michigan’s agricultural crops are dependent on labor intensive hand-harvesting or processing.
- The Migrant Labor Housing Program is designed to ensure the safety of housing occupied by five or more migrant agricultural workers. Compliance with Part 124 housing rules means safe water supplies, proper sanitation facilities, proper food preparation and storage facilities, proper waste disposal, fire and structural safety.
- Quality living conditions are essential for the health of migrant workers and their families, improve worker productivity, and reduce the risk of food borne illnesses.
- MLHP staff provide field support for Michigan Works Job placement for the H2A Guest Worker Visa Program.
- Provision of multiple State of Michigan services via MLHP staff reduces overall costs and ensures requirement consistency.



Why it Matters:

- Migrant workers play an important role in the planting, cultivating, harvesting, and packaging of numerous labor-intensive crops grown in Michigan. These crops generate \$2.3 billion in farm gate revenues each year.

Key Stakeholders

- Fruit and vegetable growers
- Migrant farm workers and advocates
- Consumers of fresh fruits and vegetables
- Workforce Development Agency – H2A Guest Worker Program

Key Statistics

- | | |
|---------------------------|---------|
| • Total inspections | 1,934 |
| • Occupancy inspections | 720 |
| • Sites inspected | 774 |
| • Housing units inspected | 3,944 |
| • Housing capacity | 24,100 |
| • Crop value | \$2.3 B |

2015 Accomplishments:

- Updated violation ranking and recording system and conducted round robin inspection training sessions to ensure uniformity in licensing.
- Additional complete housing construction plans for various capacities were developed.
- A full contingent of trained inspectors, coupled with emphasis on corrective action plan follow up and in-season occupancy inspections, increased the number of inspections performed by 37 percent over the programs three year average.

Measuring Success:

Metric	2011	2012	2013	2014	2015
Applications					
Not Opening	61	108	82	50	76
Opening	794	748	777	784	798
Inspections					
Licensing	895	797	935	971	1,019
H2A	34	34	51	78	88
Occupancy	9	79	694	714	720
Referral	3	12	14	22	23
Enforcement		4	4	4	3
Plan Review	8	19	22	44	81
Total *	1,028	914	1,648	1,771	1,934
Licensing					
Camps	777	704	755	772	774
Units	3,749	3,404	3,723	3,836	3,944
Capacity	22,820	21,005	22,747	23,583	24,100

* Total site visits - some inspections are multi-faceted covering licensing and H2A, for example.

Dashboards and Scorecards:

The MLHP provides quarterly updates to the departmental scorecard on the total number of inspections completed relative to the average for the previous three years. Metrics for 2015 were 108 percent, 115 percent, 138 percent, and 137 percent for the first, second, third, and fourth quarters respectively.

2016 Program Goals:

- 100 percent pre-season licensing inspections prior to occupancy and 100 percent in-season inspection during occupancy.
- Draft standalone Migrant Labor Housing legislation and amendments to Part 124 to align with United States Department of Labor and Michigan Occupational Safety and Health Administration standards.

Michigan Department of Agriculture & Rural Development
Environmental Stewardship
QUALIFIED FOREST PROGRAM – 2015



Manager: Richard Harlow, 517-284-5627, harlowr@michigan.gov

Legal Authority: MCL 211.7jj[1] (General Provisions), MCL 211.1033 (Recapture Tax Imposition), MCL 211.1034 (Recapture Tax Rate), MCL 324.51305 (Private Forestland Enhancement Fund), MCL 324.51306 (Qualified Foresters), MCL 380.1211 (Exemption of Qualified Forest Property)

Description of the Program:

- In 2013, the Qualified Forest Program was transferred from the Michigan Department of Natural Resources to the Michigan Department of Agriculture and Rural Development.
- Through the QFP, private forestland property owners are encouraged to manage their forest and to harvest timber in a sustainable fashion based on a forest management plan prepared by a qualified forester.
- For a parcel to qualify for the program the minimum parcel size must be 20 acres and the maximum size must not exceed 640 acres. Parcels between 20 and 39.9 acres must be at least 80 percent stocked with forest. Parcels between 40 and 640 acres must be at least 50 percent stocked with forest.
- If an application is approved for enrollment, the landowner executes and records an affidavit attesting that they will keep the land in forest and manage the forest based on the forest management plan.
- Land approved to be enrolled is exempt from school operating taxes, typically 18 mills, and when sold, the new owner may keep the taxable value capped on the property.



Why it Matters:

- More than 10 million acres of forested land in Michigan is owned by “non-industrial” private landowners. These lands are currently harvested at 1/3 the rate of forest growth. Consequently, millions of dollars of timber that could be harvested is going unutilized.
- This program improves both our natural resource base and strengthens Michigan’s economy. We currently estimate that this program will stimulate over 900 additional forest related jobs, \$195 million in business revenue, and \$44 million in labor income. In addition, a number of private foresters have increased their staff for writing forest management plans because of interest in QFP.

Key Stakeholders:

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

Key Deliverables:

- Improved timber, wildlife, and recreational values
- Provide property tax incentives
- Stimulate economic development
- Attract wood products businesses through higher quality timber and forest inventory information

2015 Accomplishments:

- 81,875 new acres were enrolled, bringing total participation to 299,099 acres.
- Through implementation of revised data entry and notification procedures, QFP staff is better equipped to track upcoming forest practices as called for in forest management plans, and to notify those participants via letter when the practice is required. Updated forms allow for reporting and updating associated practice information in the QFP database once the forest practice is completed or amended.
- QFP staff assisted in the legislative process and passage of Public Act 107 (2015). The new legislation allows for a combination of agricultural use property and forest use property for enrollment in the QFP. The law affords landowners an opportunity to enroll property in QFP that would not have previously met the usage/stocking density requirements for either Qualified Agricultural Property or Qualified Forest Property.
- On September 14, 2015, ARAUCO North America announced the construction of the largest continuous particleboard press in North America, near Grayling. The value of the investment in the plant is \$325 million and the plant will create 250 direct permanent jobs. The plant will be completed in 2018. This facility will use pulp wood primarily from privately owned forest property. The QFP was able to provide statistical information regarding enrollment in the program and the availability of pulp wood from Northern Lower Michigan. This information was instrumental in attracting ARAUCO to Michigan.

Measuring Success:

Metric	2013	2014	2015
Applications submitted	326	637	702
Forest management plans received	320	669	647
Qualified forest affidavits recorded	2,049	726	674
Acres from Qualified Ag/Forest Combo (PA 107, 2015)	N/A-	N/A	156
Acres from DNR Private Forest Program	94,477	100	201
Acres from DNR Commercial Forest Program	1,839	8,557	8,191
New acreage enrolled for year	49,581	73,065	81,875
Total cumulative acres enrolled	144,158	217,223	299,099
Progress toward 1.2 million acre enrollment cap	12%	18%	25%
Harvested wood products (cords)	2,403	26,050	55,543
Harvested wood products (tons)	2,744	15,096	38,451
Harvested wood products (1,000 board feet)	168	1,372	3,390
Harvested timber value (\$)	\$174,629	\$1,115,344	\$3,198,254
Revenue received from 2 mill fee	N/A	\$63,892	\$146,428

Dashboards and Scorecards:

The QFP did not have an item on the departmental scorecard for 2015. Staff is working with MDARD's Director of Strategy and Business Performance to design measures toward this end.

2016 Program Goals:

- Enroll an additional 100,000 acres in the QFP.
- Complete work with LKF Marketing toward the development of a plan to raise awareness of the benefits of enrollment in QFP with private landowners in Michigan.
- Continue to streamline business process through lean process improvements.



Coordinator: Steve Mahoney, Resource Analyst – 517-284-5620, email: mahoneys@michigan.gov

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

Description of the Program:

- 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 for their nutrient value. The Michigan Department of Environmental Quality, Water Resources Division, regulates the land application of biosolids in Michigan. 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.
- Current program activities include quarterly meetings with the Biosolids Coordinating Committee, an annual conference, and participation at the Michigan Township’s Association Annual Conference, Michigan Joint EXPO, and the Michigan Association of Conservation Districts. In a typical year, approximately 175 waste water treatment plants generate over 85,000 dry tons of biosolids which are applied to approximately 18,000 acres of agricultural land in Michigan.



Why it Matters:

- Increasing energy and fertilizer costs continue to add value to the nutrients made available for crop production by the on-farm utilization of biosolids.

Key Stakeholders

- 175 municipally-owned wastewater treatment facilities that land apply biosolids
- Farmers utilizing biosolids in their crop production
- Rural residents near the crop fields where biosolids are land applied
- State, county, and township elected officials

Key Deliverables

- 3,500 tons of nitrogen utilized as fertilizer
- 1,800 tons of phosphorus used as fertilizer
- 300 tons of potassium utilized
- \$10 million in fertilizer value to farmers
- Nutrients in biosolids used as fertilizer rather than disposed of as a solid waste
- \$10 million in savings to the biosolids industry

FY15 Accomplishments:

- Developed and maintained Michigan Biosolids Team Partnership with Michigan Water Environment Association (MWEA), Michigan State University Extension, MDEQ, and MDARD to promote the beneficial use of biosolids.

Measuring Success:

Metric	2011	2012	2013	2014	2015
Land area for biosolids application (acres)	18,000	20,000	19,000	18,000	16,500
Biosolids applied (tons)	81,000	91,000	88,000	82,000	76,000
Nitrogen used as fertilizer (tons)	3,450	3,900	3,750	3,500	3,250
Phosphorus used as fertilizer (tons)	1,750	2,000	1,950	1,800	1,650
Potassium used as fertilizer (tons)	300	330	320	300	275
Farm value of biosolids used as fertilizer- \$ millions	10	12	11	10	10
Wastewater treatment plant cost savings- \$ millions	10	12	11	10	10
New farmers signed up at MSU Ag Expo	13	24	12	11	N/A
Participants attending Biosolids Conference	114	N/A	103	88	N/A

Dashboards and Scorecards:

- The Biosolids Program did not have an item on the departmental scorecard for FY15. Staff is working with MDARD's Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

- Update existing and develop new printed biosolids educational materials.
- Produce display banners to use at conferences and education/outreach meetings.
- Provide training to conservation district technicians on the beneficial use of biosolids so they can provide education and targeted technical assistance to farmers and local officials in their districts.
- Work with MSU Extension and MWEA to promote the beneficial use of biosolids.
- Work with Michigan Agriculture Environmental Assurance Program Cropping Committee to distribute a biosolids supplement to Field*A*Syst to farmers in close proximity to sources of biosolids.
- Work with Biosolids Coordinating Committee to organize and participate in a facility tour of the Detroit Water and Sewage District Waste Water Treatment Plant and biosolids processing facility.



Manager: Wayne Whitman, 517-284-5618, whitmanw@michigan.gov

Legal Authority: Michigan Right to Farm Act, Public Act 93 of 1981, as amended

Description of the Program:

- The Right-to-Farm Program provides a common sense approach to investigate and resolve environmental and nuisance complaints involving farms in Michigan. Individuals with concerns about polluted runoff, excessive odor, or environmental issues associated with a specific farm may file a complaint with the Michigan Department of Agriculture and Rural Development.
- MDARD investigates on-farm management of conditions, activities and/or materials relative to a set of science-based Generally Accepted Agricultural and Management Practices (GAAMPs) developed by a technical advisory committee of stakeholders and agency representatives.
- If MDARD determines a farm is operating in conformance with the applicable GAAMPs, the farm earns an affirmative defense from a nuisance lawsuit. If changes are needed, farmers are advised to seek technical assistance through the Michigan State University Extension, the U.S. Department of Agriculture - Natural Resources Conservation Service, conservation districts, and private consultants.
- About 1/3 of the complaints are not verified; the farm operation is found to be in conformance with GAAMPs. Nearly all of the rest implement changes to resolve environmental or nuisance problems in a timely manner. Unresolved cases may be referred to the Michigan Department of Environmental Quality (MDEQ) for enforcement under Michigan's National Resources and Environmental Protection Act.

Why it Matters:

- On-farm production agriculture is the foundation of Michigan's \$101.3 billion food and agriculture industry.
- Environmental performance on farms affects everyone's water quality and overall quality of life in rural areas where farms are located. The economic success and social viability of farms depends on their productivity, environmental performance, and social compatibility.

Key Stakeholders:

- Michigan farmers
- Residential non-farm neighbors
- Michigan counties
- Township officials
- Michigan Department of Environmental Quality
- MSU Extension
- USDA Natural Resources Conservation Service
- Michigan conservation districts

Key Deliverables:

- Timely complaint response
- Consistent evaluation of on-farm practices
- Science-based standards
- Conflict resolution
- Pollution prevention
- Efficient and effective on-farm resource management



FY15 Accomplishments:

- Timely investigation of new environmental complaints; over 95% within seven business days.
- Follow up inspections to verify corrective management practices are implemented.
- On-farm environmental performance and pollution prevention based on scientific standards and documented by inspections.

Measuring Success:

Metric	2009	2010	2011	2012	2013	2014	2015
New complaints received	137	132	112	154	137	117	137
On-farm Investigations	152	151	131	167	153	133	154
First response within 7 business days (%)	94	94	94	91	75	89	89
Follow-up inspections	109	99	125	198	117	119	159
Proactive inspection requests	15	19	19	13	16	16	7
Category determinations	N/A	N/A	N/A	N/A	N/A	3	16
Counties served	45	51	44	52	52	51	51
Resolution							
Not-verified (%)	32	43	44	28	37	31	34
Resolved/abated (%)	65	55	54	70	59	69	66
Complaint Type (%)							
Odor	35	54	54	48	45	42	40
Groundwater	13	0	0	3	9	2	2
Surface water	50	45	45	48	40	49	52
Bees	2	0	0	1	1	1	1
Farm market					1	0	1
Enterprise Type							
Livestock	88	85	81	84	89	80	77
Crops	12	15	19	15	11	14	20
Other	0	0	0	1	0	6	3
Corrective Actions							
MMSPs developed	20	15	11	13	22	11	12
MMSP au covered	4481	1720	3259	6874	4729	4712	8414
Livestock exclusions (au)	525	469	1020	327	627	144	150
Streambank fencing installed (feet)	2800	12180	20000	2520	2890	2060	2250
Manure incorporation (acres)					5548	6547	7460
Improved manure management (acres)	3845	1392	3758	803	4793	6395	7429

Scorecards:

The Right to Farm Program did not have an item on the departmental scorecard for fiscal year 2015. Staff is working with MDARD’s Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

- Timely response to complaints, including an initial on-site inspection within seven business days.
- Work with stakeholders to promote the pro-active implementation of applicable GAAMPs on Michigan farms.
- Implement a new inspection data handling system with a revised database.
- Implement a revised records management system reporting process.

**Michigan Department of Agriculture & Rural Development
Environmental Stewardship Division
RIGHT TO FARM GAAMPS REVIEW – FY15**



Manager: Wayne Whitman, 517-284-5618, whitmanw@michigan.gov

Legal Authority: Michigan Right to Farm Act, Public Act 93 of 1981, as amended

Description of the Program:

- The Michigan Right to Farm Act provides broad definitions of a farm, farm operation, and farm products for purposes of on-farm production practices in Michigan. This law authorizes the Michigan Commission of Agriculture and Rural Development to identify and adopt Generally Accepted Agricultural and Management Practices (GAAMPs). The law requires the Commission to review each set of GAAMPs annually.
- The GAAMPs are developed by a technical advisory task force review committee of stakeholders and agency representatives. Eight specific sets of GAAMPs cover:
 - Manure Management and Utilization,
 - Pesticide Utilization/Pest Control,
 - Nutrient Utilization, Care of Farm Animals,
 - Cranberry Production,
 - Site Selection and Odor Control for New and Expanding Livestock Facilities,
 - Irrigation Water Use, and
 - Farm Markets.
- Task force review committee meetings are conducted at the discretion of the committee chairperson. Michigan Department of Agriculture and Rural Development staff provides program specific examples of the ‘real world’ on-farm application of GAAMPs.
- MDARD administers the editing of the GAAMPs, maintains draft GAAMPs on the department’s website, presents draft GAAMPs to the Commission, and publishes each set of adopted GAAMPs annually.

Why it Matters:

- The GAAMPs promote environmental stewardship on all Michigan farms, social compatibility, and an economically prosperous agricultural industry.

Key Stakeholders

- Michigan farmers & commodity organizations
- State and locally elected officials
- Michigan Dept. of Environmental Quality
- Michigan State University Extension
- USDA Natural Resources Conservation Service
- Michigan conservation districts

Key Deliverables

- Annual review and update of GAAMPs
- Public input on the GAAMPs received and provided to the review committees
- Provide draft GAAMPs to the Commission or review/approval annually

FY15 Accomplishments:

- Each GAAMPs review committee chairperson contacted to initiate annual review process.
- MDARD staff participation in each GAAMPs committee meeting.
- Public input meetings conducted to receive feedback and input on all draft GAAMPs.
- Program information provided to the Commission.
- Education/Outreach meetings conducted to publicize changes in the GAAMPs.

Measuring Success:

The number of task force meetings on each GAAMP provides an indicator of magnitude of use in the field, as well as updates needed. Manure Management and Livestock Siting typically see more changes than Pesticide Use and Pest Control, which is closely regulated, whereas, few complaints are received about cranberry production or irrigation.

Annual Review Committee Meetings	2011	2012	2013	2014	2015
Manure Management and Utilization	3	2	3	1	3
Pesticide Use and Pest Control	0	0	0	0	0
Nutrient Utilization	0	1	1	1	2
Care of Farm Animals	1	1	0	1	0
Cranberry Production	0	0	0	0	0
Livestock Siting	1	4	7	2	5
Irrigation Water Use	1	0	1	0	0
Farm Markets	1	0	1	0	0

Dashboards and Scorecards:

- The Right to Farm Program did not have an item on the departmental scorecard for FY15. Staff is working with MDARD's Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

- Provide realistic on-farm information to review committees for consideration in the annual review process and for proposed updates, edits, or changes to existing GAAMPs.
- Relay comments and feedback about GAAMPs received from the general public to review committees.
- Maintain effective working relationships with review committees and stakeholders.
- Provide information on MDARD's administration of the GAAMPs to the Commission.



Manager: Wayne Whitman, 517-284-5618, whitmanw@michigan.gov

Legal Authority: Michigan Right to Farm Act, Public Act 93 of 1981, as amended

Description of the Program:

- The Right to Farm Livestock Facility Siting Program is designed to help farmers properly plan, site, build, and maintain new and expanding livestock production facilities.
- A set of Generally Accepted Agricultural and Management Practices (GAAMPs) for Site Selection and Odor Control for New and Expanding Livestock Facilities has been developed and adopted by the Michigan Commission of Agriculture and Rural Development. These science-based GAAMPs include a comprehensive set of site planning, odor evaluation and control, manure management and utilization, farm management, and construction standards for new and expanding livestock facilities in Michigan.
- Farmers requesting verification to build new or expand existing livestock facilities need to complete a formal site selection review and approval process. MDARD works with the farm to evaluate management practices and facility designs, as well as the proximity to non-farm neighbors, land use zoning, and existing land use considerations. An Odor Management Plan is a key component of this process for neighbor relations and social compatibility.
- This program works pro-actively with livestock producers to effectively manage nutrients, control odors on their farms, and address the environmental and social concerns of their non-farm neighbors.
- This program also works with small producers in more populated areas on siting livestock facilities with less than 50 animal units using a neighboring housing density and proximity assessment.

Why it Matters:

- There are increasing social and environmental concerns regarding animal agricultural production in Michigan and across the nation. This is especially the case with the siting and management of new and expanding large-scale livestock production facilities, often referred to as concentrated animal feeding operations (CAFOs).
- To date, approximately 70 percent of the estimated 225 CAFOs in Michigan have completed the Right to Farm Site Selection verification process.
- In more populated areas, there is interest in growing livestock and providing those products on a more localized basis.

Key Stakeholders

- Michigan farmers
- General public
- Elected officials
- Michigan Dept. of Environmental Quality
- Michigan State University Extension
- USDA Natural Resources Conservation Service
- Michigan conservation districts
- Agriculture industry groups
- Michigan Farm Bureau

Key Deliverables

- 59,702 animal units covered under Manure Management System Plans
- 507 site requests received since 2000
- 389 have been approved
- 319 facilities have completed
- \$54 million/year of economic activity

FY15 Accomplishments:

- Timely response to verification requests.
- All “Acknowledgement of Receipt” letters are sent out within five business days.
- All “Verification Requests” are reviewed within 30 business days.
- 46 new “Verification Requests” were processed.
- 57 Site Selection GAAMPs inspections were conducted.
- Updated site verification process includes MDARD Review Team with Environmental Stewardship Division engineering staff to confirm that all new verification requests are complete and accurate.
- Significant increase in category determination requests between FY14 and FY15 of 440 percent.

Measuring Success:

Metric	2011	2012	2013	2014	2015
Site Selection Requests	24	24	40	58	46
New facilities	7	5	19	22	13
Expanding facilities	17	17	21	36	33
Livestock Species					
Dairy	11	10	16	23	19
Swine	7	7	11	18	8
Poultry	3	4	3	7	16
Beef	1	1	3	6	3
Other	2	2	7	3	0
Category Determinations <50 AUs	N/A	N/A	N/A	5	22
Facility Size					
< 1,000 animal units	9	10	23	23	16
1000 - 2,000 animal units	6	8	10	10	14
> 2,000 animal units	9	6	7	7	8
Annual Economic Benefit (\$ M)	21	43	74	108	66

Dashboards and Scorecards:

The Right to Farm Program did not have an item on the departmental scorecard for FY15. Staff is working with MDARD’s Director of Strategy and Business Performance to design measures toward this end.

FY16 Program Goals:

- Provide “Acknowledgment of Receipt” letters to farms within five business days.
- Complete Site Verification Review Team case file assessments for all new site verification requests within 30 business days.
- Continue to provide consistent administration of the Michigan Right to Farm Act, current Site Selection GAAMPs, and construction standards requirements for livestock farms to earn site verification approval.
- Increase education and outreach to animal agriculture industry on the Site Selection GAAMPs.