## Getting to Know the Michigan Agriculture Environmental Assurance Program









# What is the Michigan Agriculture Environmental Assurance Program (MAEAP)?

- Partnership
  - Farmers
  - Industry Groups
  - Conservation Districts
  - Agency
  - University
- Directed by Advisory Committee-Partner/Industry Representation







## MAEAP History

- 1998 Industry vision
- December 7, 2000 First Partnership Agreement Signed
- 2002 -First Livestock Verification
- 2003 -First Farmstead Verification
- 2005 First Cropping Verification
- March 2011- MAEAP Legislation
- 2016 –First Forest, Wetland, Habitat (FWH)
   Verification





#### MAEAP Mission

This Farm is Environmentally

Livestock System

**Cropping System** 

To develop and implement a proactive environmental assurance program that targets all size Michigan farms and all commodities, ensuring that farmers are engaging in cost effective pollution prevention practices and working to comply with state and federal environmental regulations.





#### MAEAP Structure

- Four Systems
  - Livestock
  - Farmstead
  - Cropping
  - Forest, Wetlands and Habitat (FWH)
- Built on existing, recognized programs and standards
- Built on education, complimented by technical assistance provided by Conservation District staff
- Voluntary, confidential, non-regulatory
- Every farm, every size, every commodity



## FOUR-SYSTEM/THREE-PHASE PROGRAM

Phase

**EDUCATION** 

Phase 2

ON-FARM RISK ASSESSMENT

Phase 3

THIRD-PARTY VERIFICATION

**PHASE 2 SYSTEMS** 









## The Systems of MAEAP









Farmstead

Cropping

Livestock

Forest, Wetland and Habitat (FWH)





# MAEAP Farmstead System What is it?

The farmstead system looks at issues related to the

farm headquarters

- Fuel
- Pesticides
- Fertilizer
- Manure Storage
- Well head protection
- Etc...







# MAEAP Cropping System What is it?

- The Cropping System looks at practices in the field:
  - Nutrient utilization
  - Pesticide use
  - Soil erosion
  - Recordkeeping
  - Irrigation
  - Pasture Management
  - Etc.







# MAEAP Livestock System What is it?

- Evaluates environmental risks from livestock.
  - Manure management
  - Storage/treatment
  - Transportation
  - Land Application
  - Odor
- Silage/feed storage
- Process wastewater
- Runoff







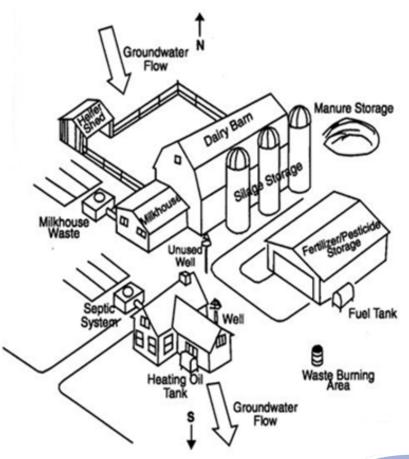
# MAEAP Forest, Wetland and Habitat System What is it?

- Evaluates environmental risks in non ag use areas
  - Land management plan
    - Identifies management options
    - Invasives addressed
    - Use Specific





## What Does MAEAP Do?











#### What Does MAEAP Address?

#### **MAEAP Facts**

Phosphorus & Nitrogen reduced on MAEAP farms could have grown enough algae to cover over 3/4 of Houghton Lake at approx. ½ " in depth. (Houghton Lake is Michigan's largest inland lake.)



Pesticide & Fertilizer Storage and Use

Fuel Storage

Well Safety

Soil & Wind Erosion & Sensitive Areas

Water Resources

All Related RTF GAAMP's & Environmental Laws

And more...





#### MAEAP Verification Process

- Verification checklist available ahead of farm visit
- No surprises
- Site visits are confidential, and at your request







# MAEAP Verification Process Results of the Visit

- MAEAP verification granted
  - Letter to local government and state representative
  - Farm sign
  - Certificate of participation
  - Verification good for 5 yearsOR



 Changes identified that are needed to be eligible for verification. Call MDA when ready for return farm visit.





#### PA 1 & 2, 2011

#### MAEAP codified in law

 Standards, Advisory Council, Ag Commission Role, Regional Assurance Teams, MOU with MDEQ & more.

#### Incentives in law

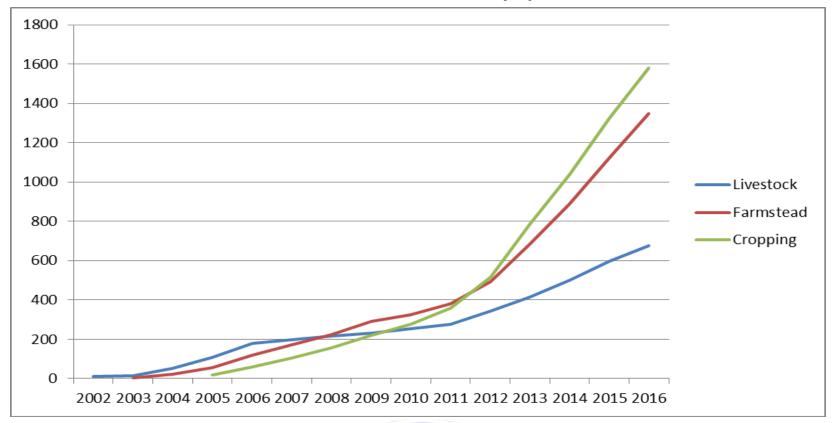
- Accidental discharge No fines & penalties. (responsibility for notification/resource damage).
- TMDL- Farms verified in all applicable systems considered as meeting all required practices.
- Verified farms following standards & receiving defined rainfall with discharge considered nonpoint source discharge. Corrective action to avoid future discharge.





#### New Verification Growth

#### **Cumulative New Verifications by System**







## MAEAP efforts Statewide

	2016	2017	2018	2019	2020	Total
Acres in nutrient management plans	257,808	109,998	216,209	282,335	227,298	1,093,648
Linear feet of buffer/filter strips	433,752	548,257	894,639	922,422	1,012,241	3,811,311
Acres of cover crops	42,931	18,163	37,672	63,789	58,643	220,658
Acres of conservation tillage, zone till, no till or grass cover	189,811	56,671	201,745	228,779	193,476	870,482
Sediment reduced (tons)	381,041	160,332	318,337	414,714	334,983	1,609,407
Phosphorus reduced (pounds)	651,525	265,515	547,049	673,535	551,709	2,689,333
Nitrogen reduced (pounds)	1,498,576	513,030	1,264,363	1,391,050	1,173,344	5,840,363





## MAEAP Funding

#### Total Appropriation: ~\$8M

- Freshwater Protection Fund/Fertilizer Fee: ~\$7M
- GF: ~\$1M
- NRCS Agreement: ~\$1.5M

#### Supports

- 5 Verifiers
- 2 Engineers
- 5 Regional Coordinators
- 57 Local Conservation Technicians and Engineers
- Grants to counties (Clean Sweep)
- Outreach and education





#### Freshwater Protection Fund

- All pesticides- \$270 Water Quality Fee
- Fertilizer fee- \$1/ton on all agriculture fertilizers







# Michigan Farmers are Proud to be Recognized for their Stewardship!





