



GLLC Web Meeting

State and Provincial Efforts to Reduce Nutrient Inflow to the Great Lakes





Agenda

- Welcome and Introductions
 Wisconsin Senator Andre Jacque, Chair, Task Force on Nutrient Management
- Michigan Environmental Assurance Program *Speaker - Michigan Senator Dan Lauwers* Moderator - Michigan Representative Rachel Hood
- Wisconsin Producer Led Watershed Management Grants *Speaker - Dr. Don Niles, President of Peninsula Pride* Moderator - Wisconsin Senator Andre Jacque
- Minnesota Buffer Strip Law Speaker- Angie Becker Kudelka, Assistant Director MN Board of Water and Soil Resources

Moderator - Minnesota Representative Todd Lippert

Featured Speaker



Michigan Senator Dan Lauwers

- Majority Floor Leader, Chair of Energy and Technology Committee
- Founder of Eastern Michigan Grain, active in Soil Conservation Service, MSU extension, and commodity boards.
- senDLauwers@senate.michigan.gov



Michigan Agricultural Environmental Assurance Program

Presentation By: Michigan Senate Majority Floor Leader Dan Lauwers







What is MAEAP?

Michigan Agriculture Environmental Assurance Program

- Voluntary, legislated certainty program that helps farmers and landowners reduce environmental pollution through education and technical assistance in applying best management practices to their specific farms.
- Four Systems to be MAEAP Verified
 - Cropping
 - Farmstead
 - Livestock
 - Forest, Wetlands and Habitat
- Provides farmers with technical assistance, educational programs, demonstration projects to implement conservation practices, and removal of potential contamination sources.

MAEAP Verification Process

- 3 Phases of MAEAP Verification Process
 - Education
 - ► Action/Risk Assessment
 - ▶ Verification

Re-Verification every 5 years

Total MAEAP Verifications

as of April 12, 2021

- Verifications 5,910
 - Cropping 2,417
 - ▶ Farmstead 2,056
 - Livestock 993
 - Forest, Wetlands and Habitat 444
- Reverifications 3,025
 - Cropping 1,279
 - ▶ Farmstead 1,177
 - Livestock 563
 - Forest, Wetlands and Habitat 6

Reverification retention average: 85 to 87%



TOTAL MAEAP ENVIRONMENTAL OUTCOMES 2016-2021

Theteler

Information collected from MAEAP verified farms used to calculate environmental outcomes:

	<u> 1 otals:</u>
Acres included in a nutrient plan or CNMP	1,101,508
Linear feet of buffer/filter strips	1,943,882
Acres of cover crops	213,871
Acres of conservation tillage	535,297
Acres of no-till, zone till, or grass cover	355,591
Number of gullies stabilized	3,875
Feet of livestock exclusion	311,514
Size of silage pad in acres	139
Acres of Pest Management Plans	1,271,907



TOTAL MAEAP ENVIRONMENTAL OUTCOMES 2016-2021

Sediment reduced: 1,629,547 tons

Phosphorus reduced: 2,704,718 pounds

Nitrogen reduced: 5,859,353 pounds

Biochemical Oxygen Demand (BOD) (5-day) from silage leachate: **8,188,086** pounds

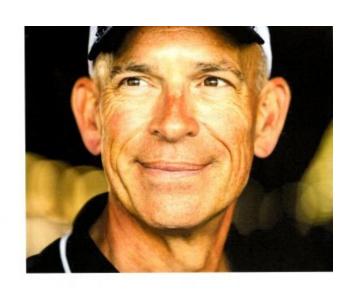
Why is MAEAP so successful?

- Voluntary, not mandated unlike any other state
- Self funded through fertilizer and pesticide fees
- Legislated certainties include protection from penalties and fines in the event of accidental discharges, act of God discharges, and protections from excessive requirements if a watershed is declared impaired.

Questions? Comments?

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- Type your question in the chat pane to be read by staff.
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Featured Speaker



Dr. Don Niles, DVM, President of Peninsula Pride

- Co-owner of Dairy Dreams LLC, 2800 cow Wisconsin dairy.
- President of Peninsula Pride Farms, a farmer led organization to bring together farmers and researchers to meet water quality.

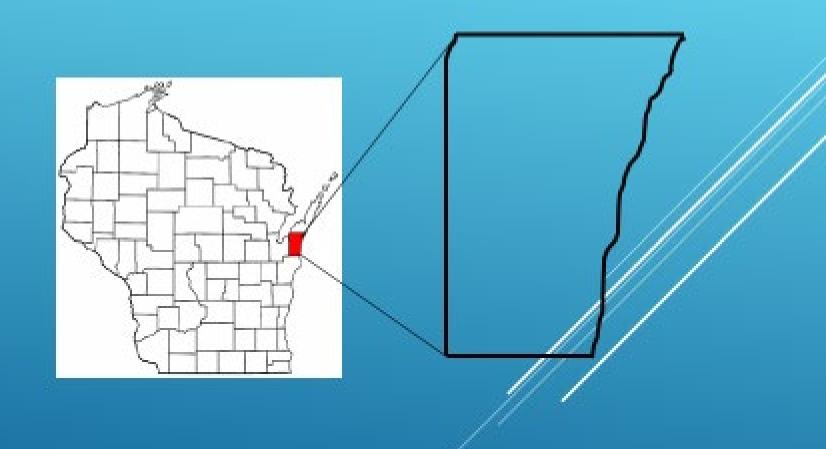
https://peninsulapridefarmsinc.org/

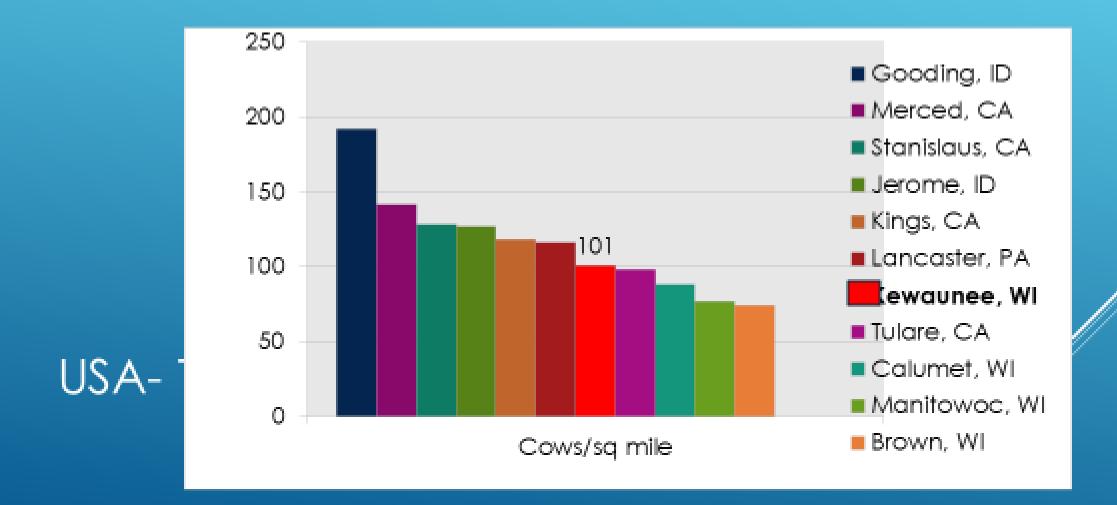
donniles@Dairy-dreams.com

PENINSULA PRIDE FARMS

CHALLENGES AND CHANGES IN THE MIDWEST DAIRY EPICENTER

Don Niles DVM- Dairy Dreams, Pagel's Ponderosa, High Plains Ponderosa Dairy





SILURIAN DOLOMITE AQUIFER

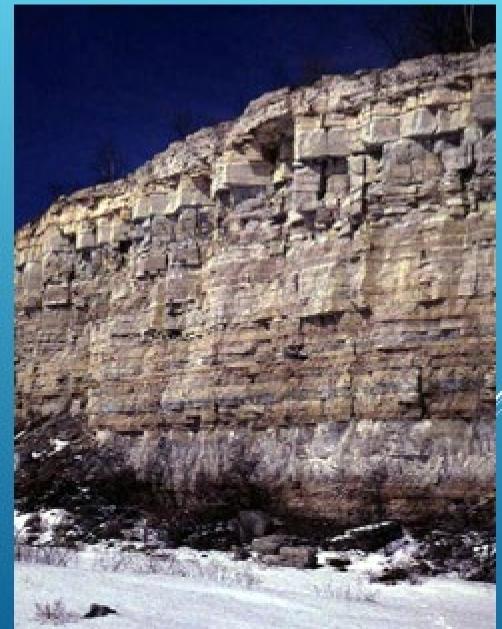






SILURIAN DOLOMITE AQUIFER





Brown Water Events in Northeast Wisconsin





- Groundwater recharge, especially spring snow melt, can generate brown water events
- Several outbreaks associated with these events e.g., EHEC,
 Campy
- · This well is code compliant, 123 ft deep, cased to 63 ft

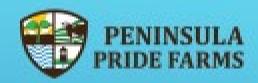
WE NEED TO ACCEPT AND ACKNOWLEDGE OUR SHARE OF THE PROBLEM

- Clearly, we are not the whole cause of the water contamination, but we are a significant contributor
- It is our responsibility to creatively and energetically protect our land, animals and neighbors. That's our job
- It is ok to not have all the answers, but it is not ok to stop trying



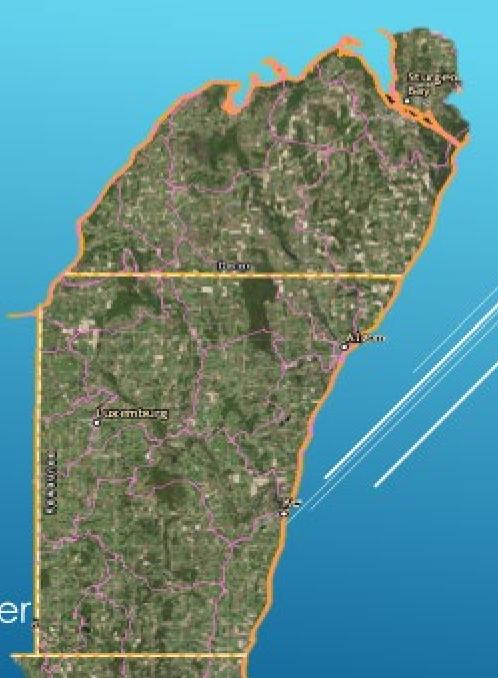
PENINSULA PRIDE FARMS

A secure future for farmers and our neighbors



WHO WE ARE

- Farmer-led, not-for-profit organization in Kewaunee and southern Door counties
- Farmers, businesses, agencies focused on improving surface and ground water quality





MEMBER FARMS VARY IN SIZE

- 46 dairy and crop farmers
- Dairy sizes, 60 to 6,000 cows
- 34,755 cows 50% of area
 cows
- 69,737 acres 50% of tillable acres



Mark and Lisa Schmidt family, Casco, Wis.



GOALS FOCUS ON IMPROVEMENT

- Define issues, set goals and determine how to measure progress in protecting surface and ground water
- Evaluate member farms to craft individual plans for continuous improvement
- Assist farmers in meeting voluntary standards recommended by state workgroup for sensitive fields



WE AIM TO PROTECT LAKES, STREAMS

- Focus on surface water
- Improving soil health
- Reducing phosphorus loss





WE WANT SAFE DRINKING WATER



- Focus on ground water
- Reduce pathogens
- Reduce loss of nitrogen



"We will empower farmers with knowledge, training and shared experiences. And we will demonstrate how the agricultural community is committed to doing its fair share in making improvements."



2019 PPF Farmer practices 33 members:

- 18,697 acres of conservation tillage practices (either strip-till or no-till planting)
- 73,398 acres covered by nutrient management plans (NMPs)
- 10,124 acres of cover crops
- 6089 acres with low disturbance manure injection (LDMI)

2020 PPF Farmer practices 38 members:

- 21,426 acres of conservation tillage
- 83,072 acres of NMPs
- 18,654 acres of cover crops
- 4,032 acres of LDMI



"The Door County Peninsula can have both safe, clean water and a thriving agricultural community."



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Featured Speaker



Angie Becker Kudelka, Assistant Director, MN Board of Water and Soil Resources

- 20 Years Experience in Conservation Leadership
- Degrees in Environmental Resource Education, Sociology and Non-Profit Leadership
- angie.beckerkudelka@state.mn.us



Minnesota Buffer Law & WQ Certification Program

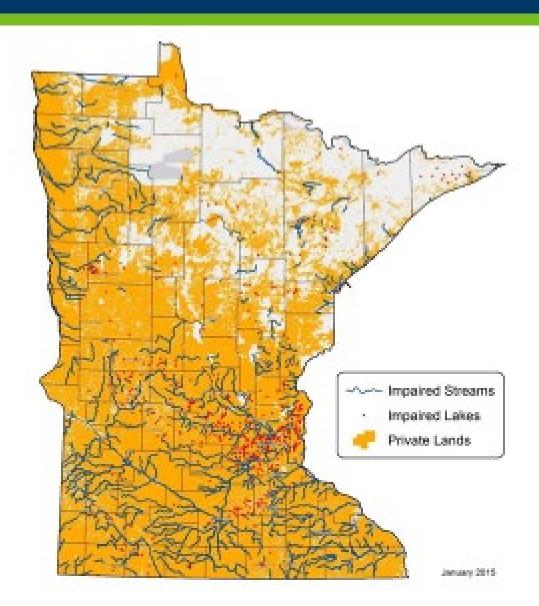
Angie Becker Kudelka | Assistant Executive Director for Strategy and Operations

April 2021 www.bwscstate.mn.us

BWSR mission



BWSR Business model



Private lands

Small executive branch agency of conservation professionals

Local government delivery system

On-the-ground results



2015 Governor Initiative

Benefits of buffers



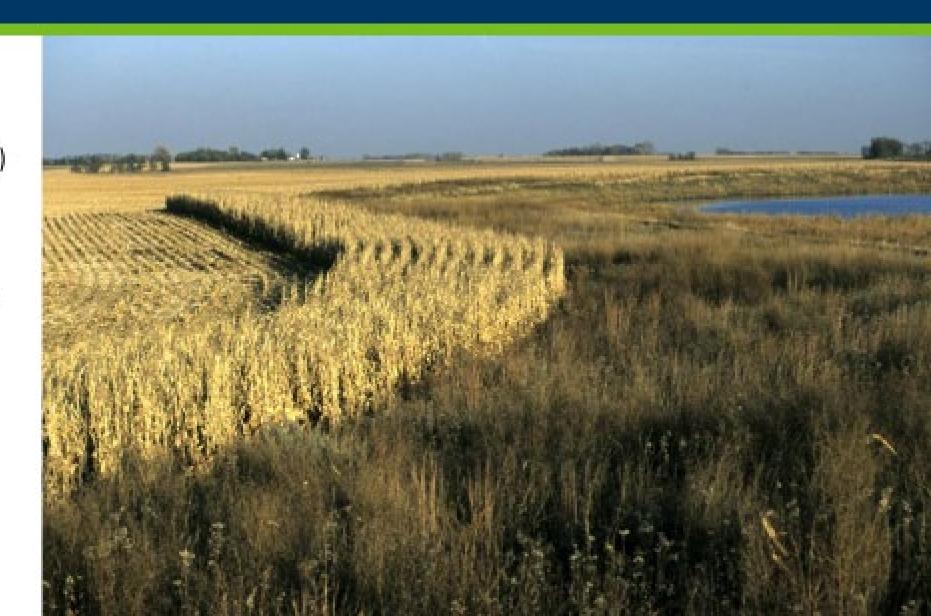






Riparian Protection Law

- 50 foot average (30' min)
 Public waters
- 16.5 foot minimum
 Public Drainage Systems
- Perennial Vegetation





When



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5	6	7	8	9	10	11	
12	13	14	15	16	18	19	
20	21	22	23	24	25	26	
27	28	29	30				

- Practices installed on Public Waters
- Compliance waiver for Financial Assistance until 2018

Practices installed on Public Ditches



Where

Home > Ecological and Water Resources (Waters) > Water Management >

RECREATION



Makin page

Construct the

Promite.

Publications.

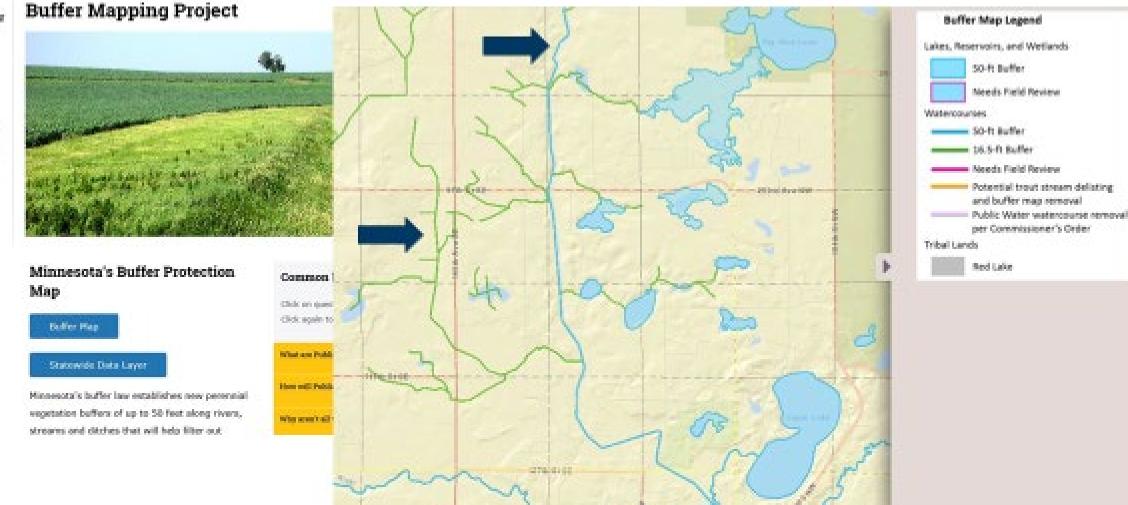
Water education (Project WICT)

Maker Statutes and Rules.

Rendered Backs

LakeFinder

Recention Company.





How... Local Assistance



Examples of Buffers Going In





Marshall County

Chippewa County

Otter Tail County







Cottonwood County

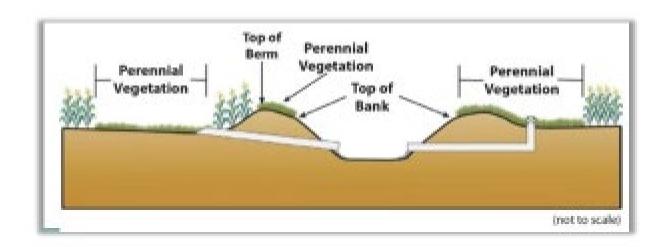
Mower County

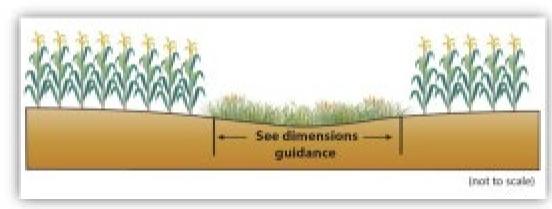
Wilkin County

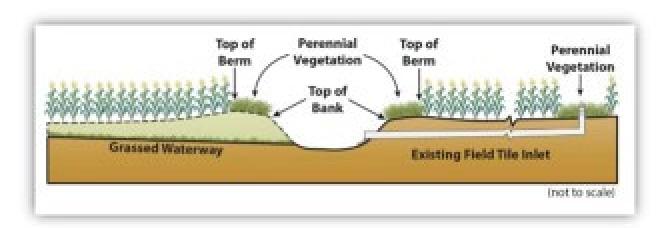
Implementing



Alternative Practices







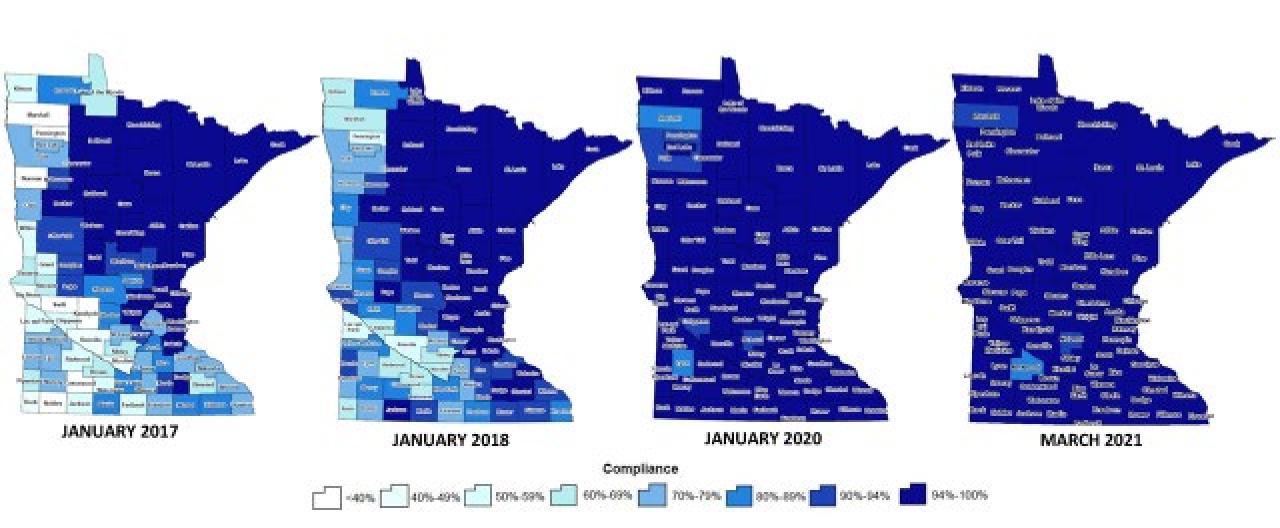




Progress



BUFFER COMPLIANCE ALL WATERCOURSES



Firem WD - Warread WD The Thin Charles . Box Labortin Discould different Different. Strake-Territoria. Material States St 1888 Bridge Will Wild River 1950 January 2019 All the internal Labor 190 Buffato Red FRANK MICH. Metro Area. apper Minnesota Hiver MD Loc Cast Printer Metro-Area Orderer States WC - Date Crock HD Medicine RAYER MICH Stockton-Rollingstone-MN City WI Vanderstool-Little Okabiena-Octreda WO Watershed Districts Counties Elected Jurisdiction and Enacted Enforcement Procedures Diested Jurisdiction and Enacted Enforcement Procedures Directled Jurisdiction Diected Jurisdiction Did Not Flest Jamediction Out Not Flect Jurisdiction

Enforcing the Buffer Law

Election of Jurisdiction

75 Counties Elected

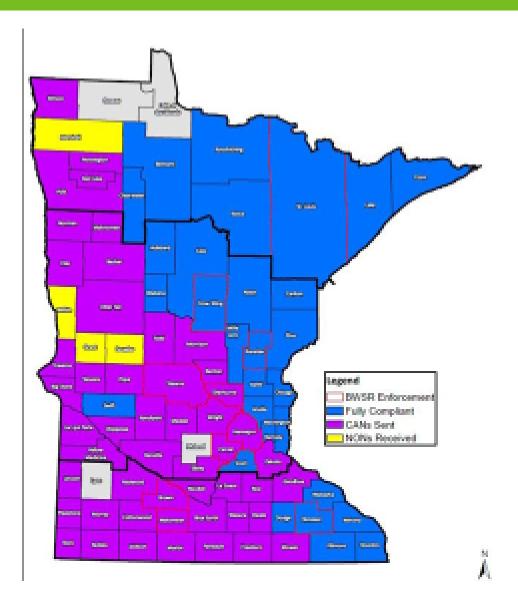
14 Watershed Districts Elected

adopted local official controls and are "with jurisdiction".

State of MN (via BWSR) enforces the law in remaining counties that decided not to be the enforcing body.



Enforcement Process and Status



- SWCDs notify Counties/State when non-compliance.
- Counties/State send correction action notices (landowners have 11 months to correct)
- 29 Counties fully compliant
- State wide approximately 2500 enforcement cases have started (over 1500 have been resolved so far.)



Minnesota Agricultural Water Quality Certification Program





- MAWQCP is a voluntary program that offers producers:
 - Recognition
 - Financial/Technical assistance
 - Regulatory certainty (applied to Buffer law)
 - Branding/Marketing opportunity
 - Check-up/Validation for growers
- Implemented by Minnesota Department of Agriculture
- Whole-farm planning for water quality
- Pairs producers with professionals to develop site-specific solutions for risks to water quality



Minnesota Agricultural Water Quality Certification Program



As of 4-19-21

1,049 certified producers 751,119 certified acres

- » 2,113 new practices
- » 112,710 tons of soil saved per year
- » 49,562 pounds of P prevented per year
- » 40,842 C02-equivalent tons reduced per year

Endorsements:

Soil Health, Wildlife, Climate Smart Integrated Pest Management



For additional information

Buffer Law:

http://bwsr.state.mn.us/minnesota-buffer-law

Ag Water Quality Certification Program:

https://www.mda.state.mn.us/environment-sustainability/minnesotaagricultural-water-quality-certification-program

Angie Becker Kudelka, MN Board of Water and Soil Resources angie.beckerkudelka@state.mn.us



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Remember to Register

Nutrient Management II Friday May 7, 10:00 CT | 11:00 ET

Featuring Ohio, New York and Ontario

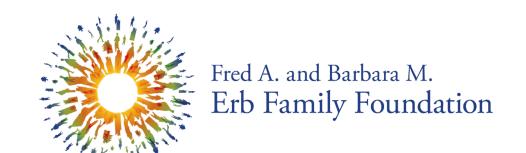
reviewing H2Ohio, Comprehensive Nutrient Management Planning and Lake Erie Demonstrating Sustainability programs

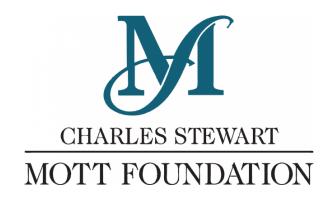
Great Lakes Commission Blue Accounting Friday May, 21, 10:00 CT | 11:00 ET

Featuring web testing of the new information service to track the region's progress toward shared goals for the Great Lakes. Hundreds of different entities - across eight states and two provinces - currently invest billions of dollars in restoring and maintaining the Great Lakes, but until Blue Accounting, there hasn't been a way to measure the effectiveness of these efforts.

Thank you to our sponsors!

TheJoyceFoundation





About the GLLC

- The GLLC is a binational, nonpartisan group of state and provincial lawmakers from the Great Lakes region.
- Organized around the principle of assuring that the Great Lakes and St. Lawrence River continue to provide a plentiful source of clean, affordable water to the region's residents, businesses, and industries.
- Legislators may enroll at bit.ly/GLLCmember (case sensitive).
 This link is available on the GLLC website: https://greatlakeslegislators.org.





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