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
Promoting Stewardship

MAEAP

Protecting the Environment

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

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

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

• Under “participants” click “raise hand” and unmute your line when we announce your name.

• Type your question in the chat pane to be read by staff.

• Just unmute yourself and ask a question.
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/](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 groundwater.

- 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.”
Questions? Comments?

• Under “participants” click “raise hand” and unmute your line when we announce your name.

• Type your question in the chat pane to be read by staff.

• Just unmute yourself and ask a question.
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
BWSR mission

Improve and protect Minnesota’s water and soil resources by working in partnership with local organizations and private landowners.
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

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

- Practices installed on Public Ditches
Buffer Mapping Project

Minneapolis's Buffer Protection Map

Minnesota's buffer law establishes new perennial vegetation buffers of up to 50 feet along rivers, streams and ditches that will help filter out...
How... Local Assistance

Goodhue SWCD

Free Drill Use for Buffers!
In 2015 the Goodhue County SWCD Supervisors adopted a local drill program for landowners interested in seeding down buffer areas next to streams and ditches. The SWCD will provide the use of the drill and provide a grazed waterway need roe to your site for free. Landowners will need to provide a vehicle to pull the drill. We ask...
Implementing

Examples of Buffers Going In

Marshall County  Chippewa County  Otter Tail County

Cottonwood County  Mower County  Wilkin County
Alternative Practices

Diagram 1: Perennial Vegetation Top of Berm Perennial Vegetation Top of Bank Perennial Vegetation

Diagram 2: See dimensions guidance

Diagram 3: Top of Berm Perennial Vegetation Top of Berm Perennial Vegetation

Diagram 4: Grassed Waterway Existing Field Tile Inlet

Minnesotta Agricultural Water Quality Certification Program

Certifying that Minnesota's farms and waters can prosper together
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 CO2-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/minnesota-agricultural-water-quality-certification-program

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

• Under “participants” click “raise hand” and unmute your line when we announce your name.

• Type your question in the chat pane to be read by staff.

• Just unmute yourself and ask a question.
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!
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.
GLLC Web Meeting

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