



MID-OHIO REGIONAL  
**MORPC**  
PLANNING COMMISSION

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info@morpc.org

**NOTICE OF A MEETING  
SUSTAINING SCIOTO BOARD  
MID-OHIO REGIONAL PLANNING COMMISSION**

**REMOTE MEETING**

**February 23, 2022, 2:30 pm – 4:00 pm**

**AGENDA**

- 2:30 pm**      **Welcome – Glenn Marzluf, Chair**  
*Chair Marzluf welcomed new Member Adrienne Williams, Growing & Growth Collective.*
- 2:35 - 2:40 pm**      **MORPC Updates – Brandi Whetstone**
- 2:40 - 3:10 pm**      **Presentation – Bartlett Durand – Sand County Foundation**  
*“Municipal-Agriculture Watershed Partnerships in Iowa — A Successful Approach to Water Quality Improvement”*
- 3:15 - 3:25 pm**      **Agricultural and Rural Communities Outreach Team Update –**  
*Brian Brandt, Team Chair*
- 3:25 – 3:35 pm**      **Presentation – Dr. Hamilton, OSU – CFAES**  
*“Farmer and Non-Farmer Stakeholder Engagement in the Scioto Watershed: Findings from OSU Capstone Projects”*
- 3:35 – 4:00 pm**      **Board Member Updates – Glenn Marzluf, Chair**
- 4:00 pm**      **Adjourn – Glenn Marzluf, Chair**

**Please notify Lynn Kaufman at 614-233-4189 or [LKaufman@morpc.org](mailto:LKaufman@morpc.org) to confirm your attendance for this meeting or if you require special assistance.**

**The next Sustaining Scioto Board Meeting  
will be on April 27, 2022, 2:30 pm – Location to be determined**

**William Murdock, AICP**  
*Executive Director*

**Karen J. Angelou**  
*Chair*

**Erik J. Janas**  
*Vice Chair*

**Chris Amorose Groomes**  
*Secretary*

Mid-Ohio Regional Planning Commission  
*Remote Meeting*

Sustaining Scioto Board

February 23, 2022, 2:30 pm

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Members Present

Larry Antosch, Ohio Farm Bureau Federation  
Brian Brandt, American Farmland Trust  
Jessica D'Ambrosio, The Nature Conservancy  
Laura Fay, Friends of the Lower Olentangy  
Watershed  
Jennifer Fish, Franklin Soil & Water  
Conservation District  
Jeremy Hoyt, City of Marysville  
Chair Glenn Marzluf, Del-Co Water Co., Inc.  
Jennie McAdams, Franklin County Public  
Health  
Danella Pettenski, City of Columbus  
Scott Stephens, Delaware Soil & Water  
Conservation District  
David Straub, U.S. Geological Survey  
Rick Van Gundy, Village of Tarlton  
Adrienne Williams, Growing & Growth  
Collective

Staff Present

Lynn Kaufman  
Edwina Teye  
Brandi Whetstone

Public Present

Bartlett Durand, Sand County Foundation  
Matthew Hamilton, OSU  
Gabby Mabayyed  
Mark McCabe, JEO Consulting Group  
Karina Peggau, OSU

# SUSTAINING SCIOTO BOARD MEETING

February 23, 2022



MID-OHIO REGIONAL  
**MORPC**  
PLANNING COMMISSION



MORPC

# Featured Presentation

*K. Bartlett Durand , Jr., Esq.*

*Sand County Foundation*

**“Municipal-Agriculture Watershed Partnerships in Iowa — A Successful Approach to Water Quality Improvement”**

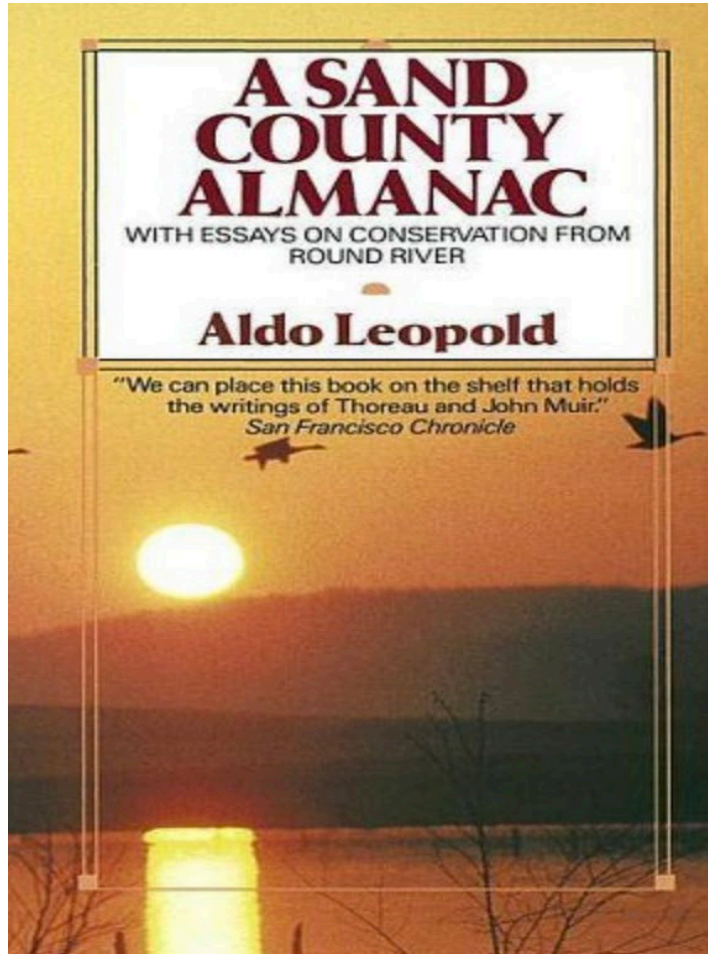


Empowering Landowners. Advancing a Land Ethic.

[www.sandcountyfoundation.org](http://www.sandcountyfoundation.org)



# Where is Sand County?





“Conservation can accomplish its objectives only when it springs from an impelling conviction on the part of private landowners.”

*Aldo Leopold*  
*unpublished manuscript*



ENVIRONMENTAL POLICY  
**INNOVATION**  
CENTER

## MISSION

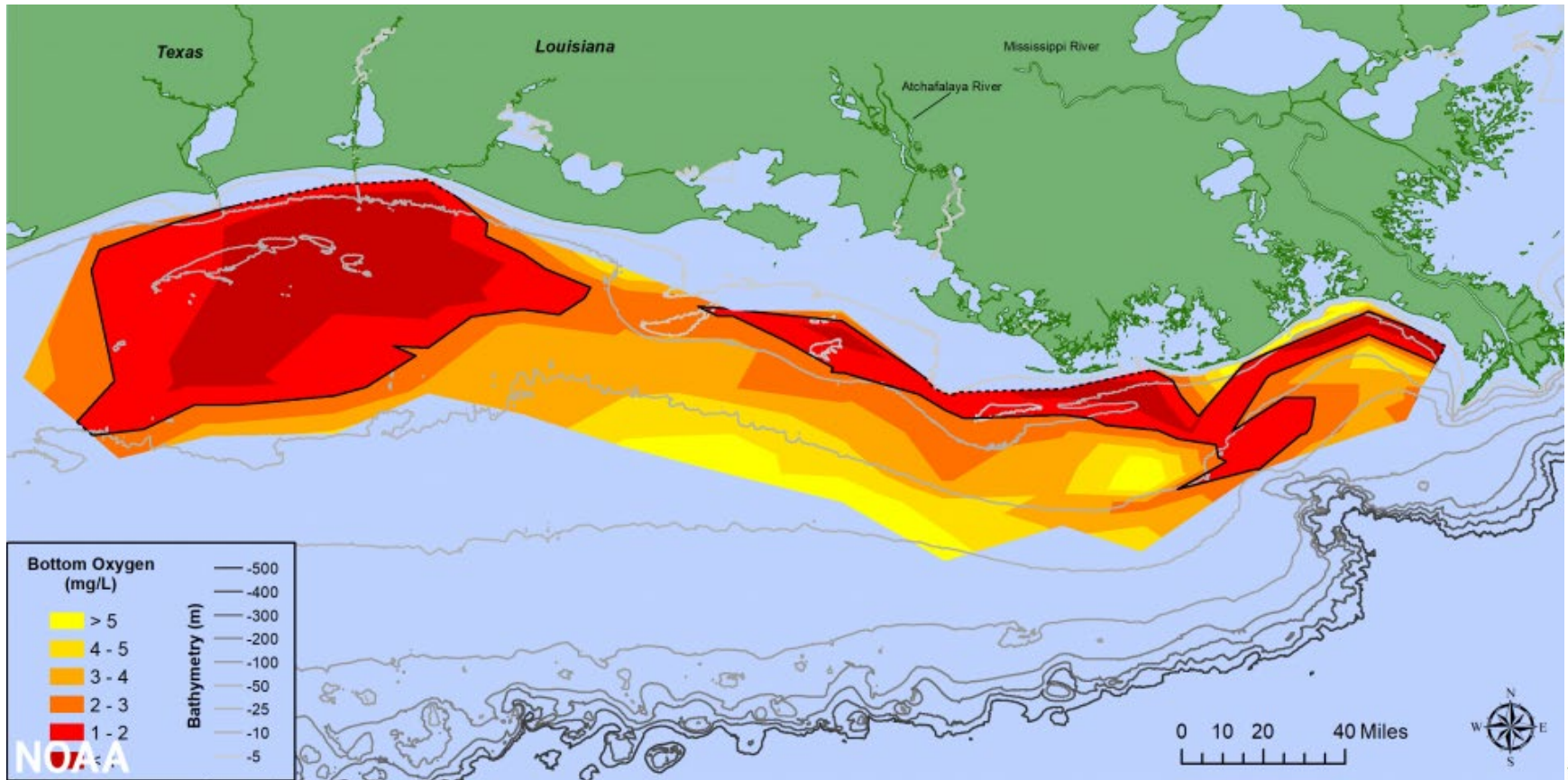
To build policies that deliver spectacular improvement in the speed and scale of conservation.

**Fiscal sponsorship:** when a nonprofit organization extends its tax-exempt status to a groups engaged in activities related to the organization's mission.

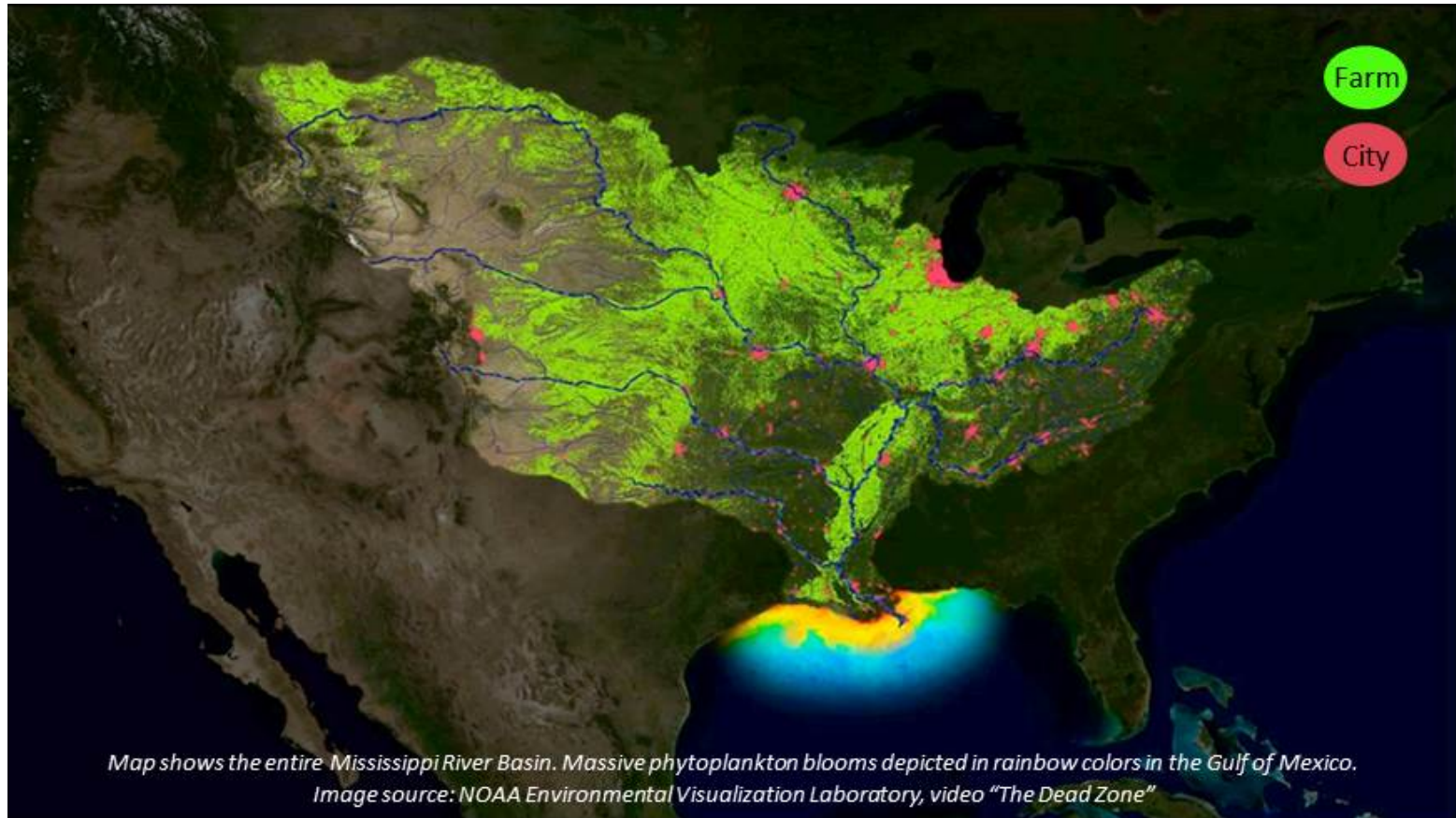




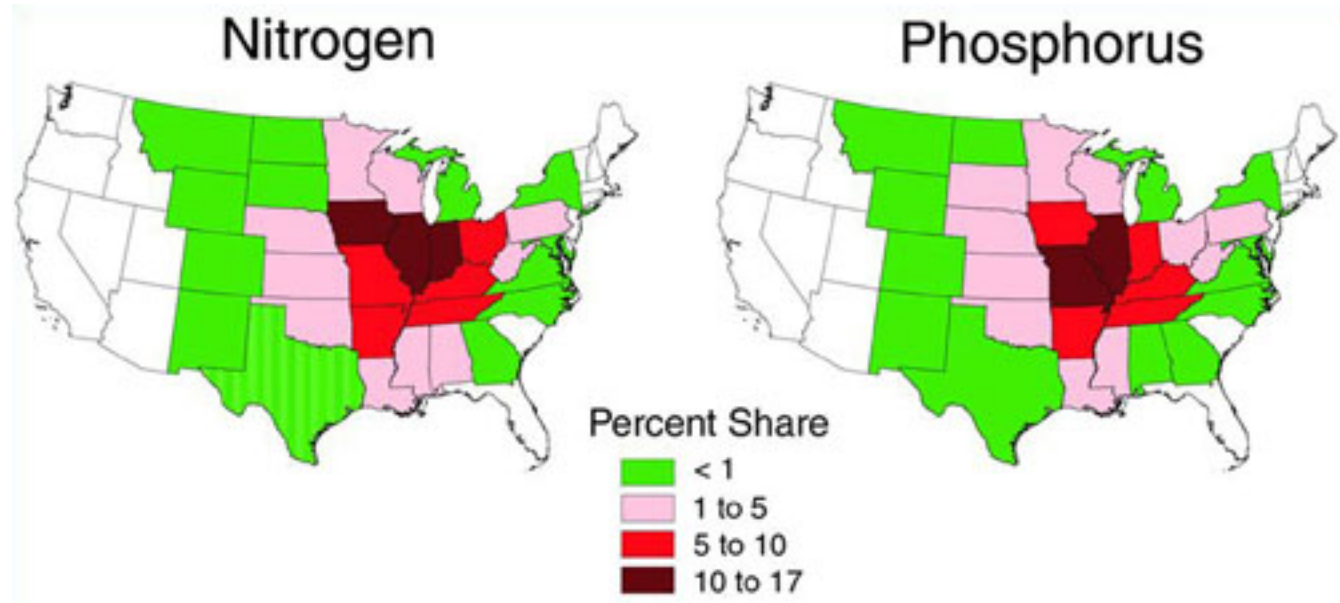
# Gulf Hypoxic Zone – 5000 sq.mi.



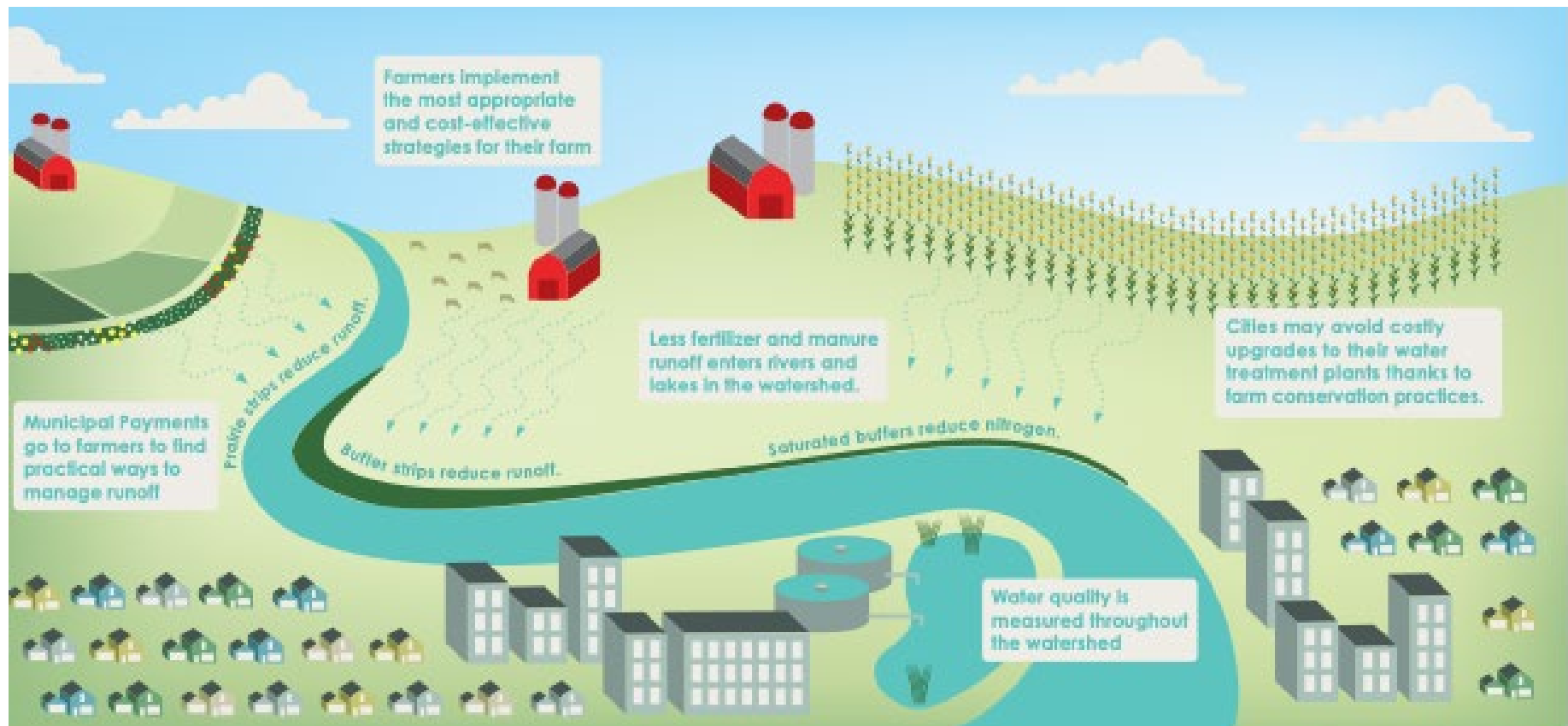
# Source of excess nutrients



# We're in the heart of it all



# Thinking at the watershed scale

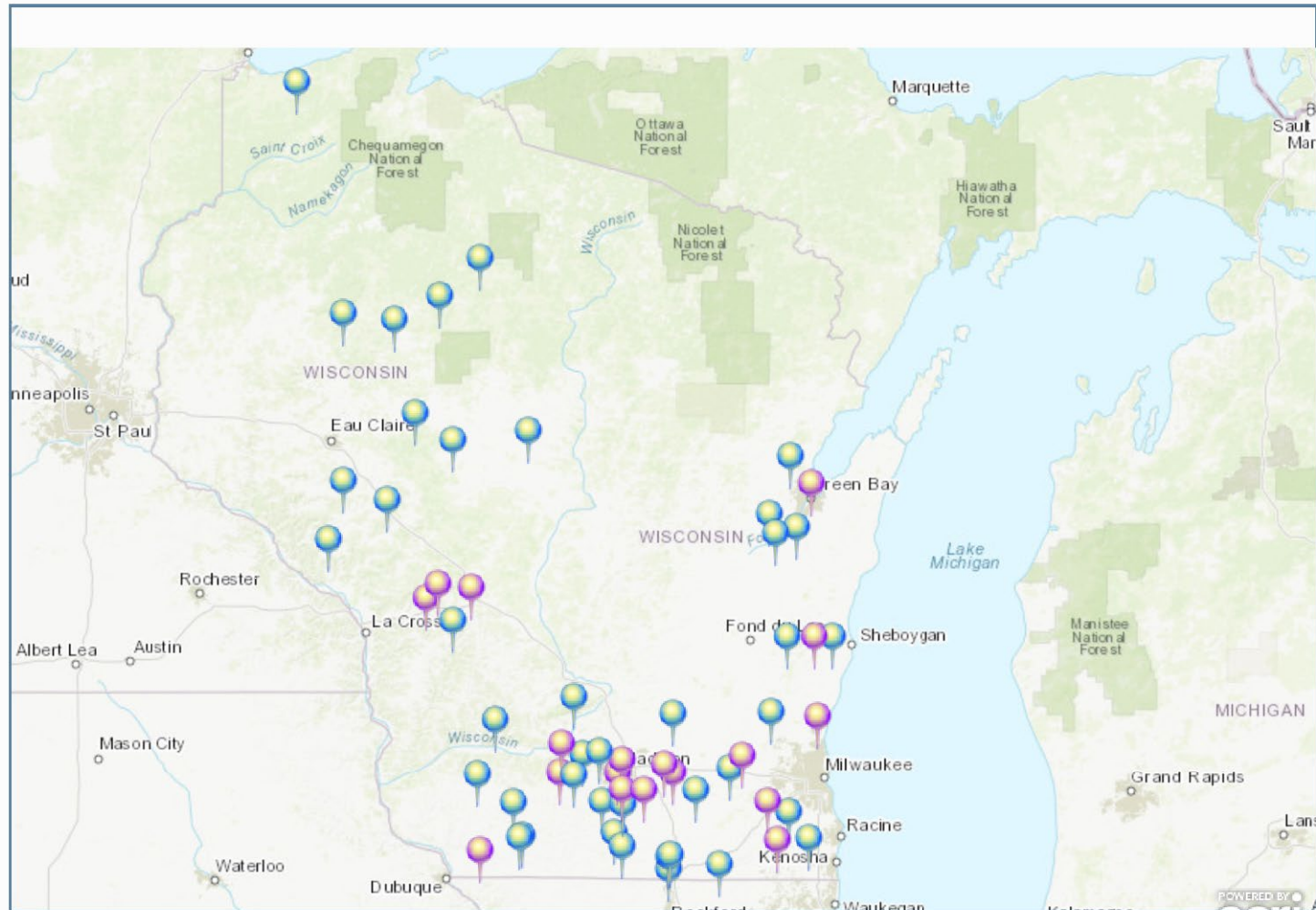


**Securing Urban/Rural Partnerships for Better Water Quality:**





# WISCONSIN



The information shown on these maps has been obtained from various sources, and no warranty as to reliability and

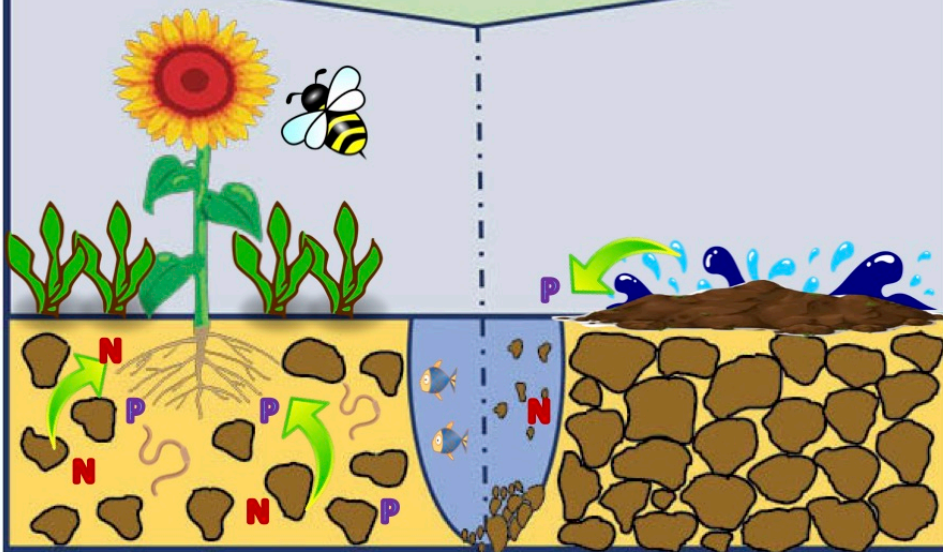
## WISCONSIN – driven by regulation

<u>Water Quality Trading</u>	<u>Adaptive Management</u>
Directly tied to permit – nutrient targets	Permittee takes responsibility for watershed-scale water quality
High ratios (often 3:1)	Generally 1:1 ratio to show progress
Pre-approval on projects	Report on general scope of projects
Often small projects, directly contracted	Usually try to aggregate work, or find many partners to help
5 year cycles of compliance (NPDES permits)	Given a longer time (20 years) to meet goals
Modeling is the key currency	Monitoring is the focus (modeling used to show short-term progress)





# Why Cover Crops?



## Benefits of Cover Crops

- Improved nutrient cycling
- Increased organic matter
- Reduced soil erosion
- Increased weed suppression
- Increased water absorption
- Improved wildlife habitat

## Cons of Conventional Crop Rotation

- Increased soil compaction
- Increased surface runoff
- Increased nutrient and sediment loss
- Organic matter degradation
- Increased risk of heavy rain
- Increased risk of severe drought



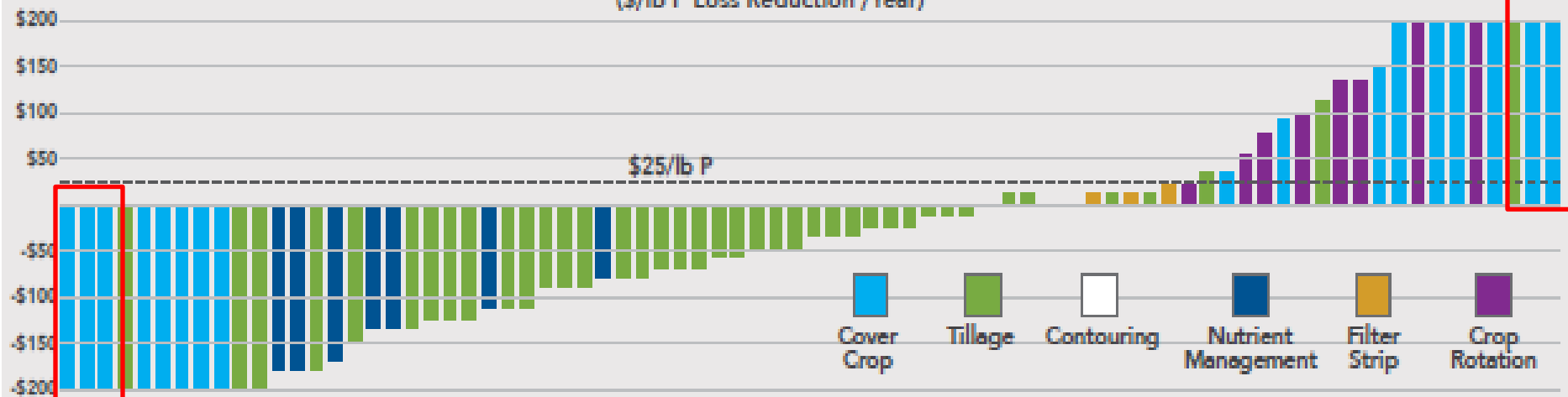


# Pilot Results for Cost Effectiveness of Various Practices

## DETERMINING COST PER POUND IN WISCONSIN'S WEST BRANCH OF THE MILWAUKEE RIVER

In the West Branch project, our project team estimated the full economic costs of implementing BMPs on specific fields and modeled the corresponding phosphorus loss mitigation. A measure of cost-effectiveness, or cost per pound P, is shown here. At a \$25/lb P payment, the cost of many BMPs were completely covered (and some already were cost savings), while other BMPs were more expensive per pound P and were less likely to be implemented at this price point.

Cost-Effectiveness of Phosphorus Loss Reduction Actions on Wisconsin Farms  
(\$/lb P Loss Reduction /Year)





# PfP Program Steps



1

Meet with farmers to gather soil tests, field info, management history, etc.



2

Model P loss from each field under baseline and several conservation scenarios



3

Farmer chooses and implements best conservation practices for his/her fields



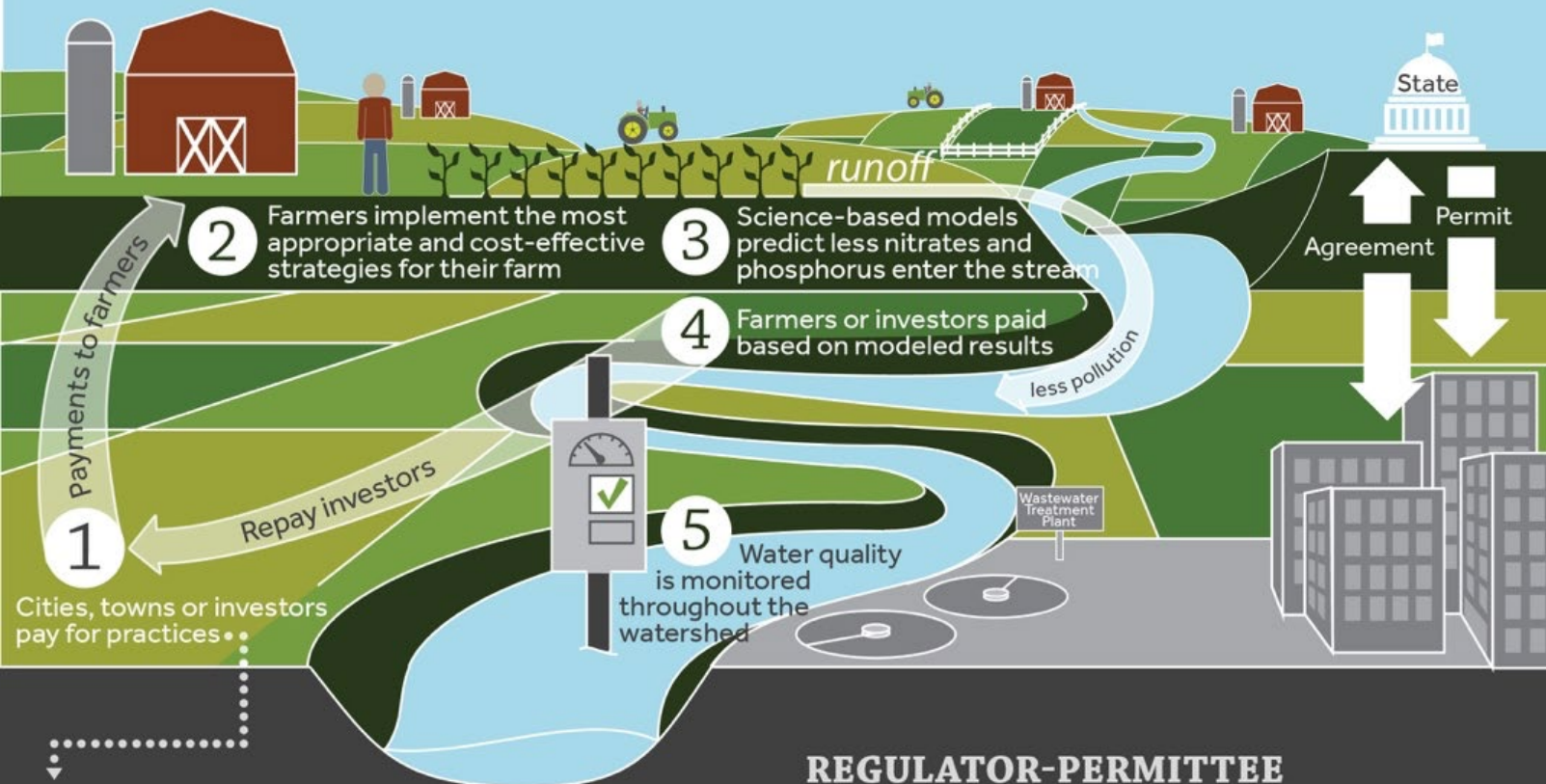
4

After verification, farmer is paid per unit P reduced

- Graphic courtesy of Winrock International







## PAY FOR SUCCESS

This performance-based approach allows contracting for nutrient reduction outcomes that meet state standards and that result from farmer-selected conservation practices.

Investor- and USDA-backed funds are willing to pay farmers for water quality practices, then wait for outcomes to be certified before being paid back by municipalities.

## REGULATOR-PERMITTEE AGREEMENTS

Formal agreements between state agencies and local government are critical to define what, when, and how outcomes will be counted, leaving local government with the freedom to decide how much watershed-based work to include in their compliance plan.

## **IOWA – regulation pressure but mostly pre-compliance setting.**

“Offset” program similar to trading, just within the same watershed and applying reductions on landscape to city’s permit.

Individual contracting


Generally pay for performance

ReHarvest / Soil & Water Outcomes Fund major player

Model of choice is the NTT – Nutrient Tracking Tool





Note: some information is public



# RIBITS - WQT

Regulatory In-lieu Fee and Bank Information Tracking System - Water Quality Trading Program



Banks & Sites

<< Collapse

TRACKING

☐ Mitigation  
☒ NRE  
☐ Both

MENU

- NRE Concepts
- Reporting
- NRE Programs
- NRE Projects
- NRE Project Establishment
- NRE Assessment Tools
- Credit Classifications
- Related Resources
- Help

FILTER

☐ USACE District  
☒ State  
☐ FWS Field Office  
☐ NOAA Fisheries Region

[Terms Of Use]

Go

1. Primary Report Rows All Actions

☒ State Abbrev List contains 'IA'

1 - 34 of 34

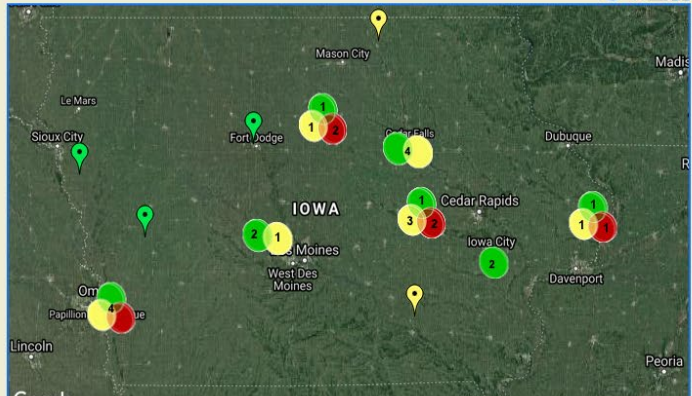
Name	Bank Type	Bank Status	State Abbrev List	Zoom
Barber Creek Wetland Mitigation Bank	Private Commercial	Pending	IA	50
Beaver Creek Mitigation Bank	Private Commercial	Pending	IA	50
Black Hawk Mitigation Bank	Private Commercial	Approved	IA	50
Brophy Creek	Private Commercial	Sold-Out	IA	50
C&W Hunter Mitigation Bank	Private Commercial	Approved	IA	50
Cedar River Crossing Wetland Mitigation Bank	Public Commercial	Approved	IA	50
Coulter Marsh	Private Commercial	Sold-Out	IA	50
Coulthard Trust	Private Commercial	Approved	IA	50
Coulthard Wetland	Private Commercial	Sold-Out	IA	50
Des Moines River Mitigation Bank	Private Commercial	Approved	IA	50
Dry Run Creek Mitigation Bank	Private Commercial	Pending	IA	50
Elk Creek Wetland Mitigation Bank	Private Commercial	Approved	IA	50
Heinemann Mitigation	Private			

Quick Filters

Filters for both USACE and FWS have been combined into one quick filter.  
--Select Quick Filter--

Google Map

☐ Roads ☒ Borders ☐ USACE Districts ☐ FWS Field Offices ☐ NOAA Regions ☐ HUC8 ☐ Footprint ☐ Service Area



Map data ©2021 Imagery ©2021 TerraMetrics Terms of Use Report a map error

Disclaimer: In most cases, RIBITS bank or ILF project limits are only approximate (not surveyed property limits).





Iowa:  
main driver is **flooding**



\$390k in Dubuque County of local dollars  
flowing into watershed for incentives

Pay for Performance type, tiered: looking at  
GHG reduction, not carbon sequestered.

Goals are threefold:

- 1) Flood mitigation
- 2) Protect the river(s)
- 3) Create recreational opportunities

Only then does cost savings for a municipal  
wastewater treatment plant upgrade come into play!





# Urban Practices – Opportunities for Layered Benefits

## Bee Branch Creek Restoration







# March 2020: Meeting with John Kim and ELPC's Al Grosboll



## Background

**Bartlett Durand** is Sand County Foundation's Director of Water Quality Partnerships. Bartlett is an attorney and businessman with more than 20 years of experience in academic research, complex litigation, mediation, transactional work and contract work focused on business outcomes. He has started three successful businesses: an artisanal farm-based cheese line from his family's dairy; a USDA-inspected meat processing business; and a retail butcher shop, The Conscious Carnivore. Durand holds a law degree from the William S. Richardson School of Law, and a BA from the University of Wisconsin-Madison. He is a graduate of the G. Lane Ware Leadership Academy and the Food Finance Institute.

**Timothy Male** is executive director and founder of the Environmental Policy Innovation Center. Tim worked at the White House from 2014-2017 serving as an Associate Director at the White House Council on Environmental Quality. Before that, he was Vice President for Conservation Policy at Defenders of Wildlife, Director at National Fish and Wildlife Foundation, and Co-Director of agriculture policy at Environmental Defense Fund. He holds degrees in science from Yale University and the University of Hawaii. His writing has appeared in the Wall Street Journal, Washington Post, Science magazine and a diversity of peer-reviewed journals. He also ran for office and won, serving three terms as a city councilmember and leading the successful effort for that city to become the first in the country to lower its voting age to 16. He is a frequent attendee of the Pritzker family-funded Breakthrough Dialogues.

The Environmental Policy Innovation Center's (EPIC) mission is to build policies that deliver spectacular improvement in the speed and scale of conservation. We believe that innovation and speed are central to broadening efforts to conserve wildlife, restore special natural places, and deliver people and nature with the clean water they need to thrive. To achieve those goals, conservation programs must evolve to accommodate our modern understanding of human behavior and incentives, and the challenges posed by humanity's expanding footprint. A small group like EPIC can punch above its size, by playing 'moneyball' with conservation—using data and practical wisdom to find small changes in policy that lead to radical improvements in wildlife and habitat conservation, cleaner freshwater, and the shared sustainable use of our public lands. We focus on a narrow set of strategies: a) improving policies that allow private sector funding or stewardship to expand or supplant public or charitable conservation work; b) transforming government policies to focus on what matters—outcomes; and c) eliminating the organizational barriers that prevent public agencies from adapting to 21st century solutions.

**Sand County Foundation**, based in Wisconsin, is a national non-profit working with farmers, ranchers, foresters and other private landowners to improve soil health, water quality and wildlife habitat. Sand County Foundation inspires and enables a growing number of private landowners to ethically manage natural resources in their care, so future generations have clean and abundant water, healthy soil to support agriculture and forestry, plentiful habitat for wildlife and opportunities for outdoor recreation.



## Project

Urban and other point sources can provide funding for farmers and rural communities to adopt water quality-improving practices. Watershed partnerships between water utilities and upstream agricultural producers are an opportunity to address this problem. Such projects can develop and implement watershed plans that reduce nutrient loading and restore water quality. A municipality or point source gains nutrient offsets to allow it to comply with its permit obligations.

The success of this approach has been demonstrated by permitted entities leading successful watershed projects in Madison, Green Bay, Oconomowoc and other locations in Wisconsin. These projects have provided permitted entities with regulatory certainty and serve as lower cost and more efficient alternatives to expensive treatment upgrades. Fully implemented initial phases of projects in Madison and Green Bay have already considerably reduced nutrient loads contributing to algae blooms in the Yahara Lakes and the dead zone in Green Bay. Published case studies of projects in Wisconsin provide concrete roadmaps that can be replicated.

Since 2017, EPIC and the Sand County Foundation have been negotiating a similar structure with the Iowa DNR to create the legal mechanisms to allow permit compliance by obtaining nutrient offsets through nutrient reduction efforts in the watershed. One of the key barriers to further deployment of Municipal-Agriculture Watershed Partnerships is simply that many permitted and regulated entities are unaware of how such projects can help them meet their regulatory requirements and save money and the specific work needed to develop the partnerships. Similarly, producers and producer organizations may not be aware of the funding opportunities available to them from such partnerships with water utilities. Many organizations have been engaged in Iowa (and other states) to document the quantifiable water quality benefits that can come from farm-based practices. Our work in Iowa has focused on the legal agreement—a Memorandum of Agreement—that gives a city predictability that the money they spend in the watershed will be recognized by the state and that water quality outcomes will be valued using a specific agreed-upon model.

The first agreement of its kind will be signed by the Iowa DNR on March 10, 2020 and by its partner the City of Dubuque by the end of March 2020 (at the next available City Council Meeting).

EPIC and the Sand County Foundation are trying to define strategies to allow a similar opportunity to be available to jurisdictions in Illinois.

**K. Bartlett Durand, Jr., Esq.**  
Director, Water Quality Partnerships  
131 W. Wilson St., Suite 610  
Madison, WI 53703  
608.729.1384  
608.333.1251 Mobile



March 2020: Covid-19



SPRINGFIELD, ILLINOIS

FILED  
INDEX DEPARTMENT

MAY 06 2020

IN THE OFFICE OF  
SECRETARY OF STATE  
CORRECTED  
Executive Order 2020-33

April 30, 2020

**EXECUTIVE ORDER IN RESPONSE TO COVID-19**  
**(COVID-19 EXECUTIVE ORDER NO. 31)**

**WHEREAS**, protecting the health and safety of Illinoisans is among the most important functions of State government; and,

**WHEREAS**, Coronavirus Disease 2019 (COVID-19) is a novel severe acute respiratory illness that has spread among people through respiratory transmissions, the World Health Organization declared COVID-19 a Public Health Emergency of International Concern on January 30, 2020, and the United States Secretary of Health and Human Services declared that COVID-19 presents a public health emergency on January 27, 2020; and,

**WHEREAS**, as the virus has progressed through Illinois, the crisis facing the State has developed and now requires an evolving response to ensure hospitals, health care professionals and first responders are able to meet the health care needs of all Illinoisans and in a manner consistent with CDC guidance that continues to be updated; and,

**WHEREAS**, I declared all counties in the State of Illinois as a disaster area on April 30, 2020 because the current circumstances in Illinois surrounding the spread of COVID-19, including the devastating impacts to the health and lives of people throughout the State, the threatened shortages of hospital beds, ICU beds, ventilators, and PPE, and the critical need for increased COVID-19 testing capacity, constitute an epidemic emergency and a public health emergency; and,

**WHEREAS**, in response to the epidemic emergency and public health emergency described above, I find it necessary to re-issue Executive Orders 2020-03, 2020-04, 2020-05, 2020-06, 2020-07, 2020-08, 2020-09, 2020-11, 2020-12, 2020-13, 2020-14, 2020-15, 2020-16, 2020-17, 2020-19, 2020-20, 2020-21, 2020-22, 2020-23, 2020-24, 2020-25, 2020-26, 2020-27, 2020-28, 2020-29, 2020-30, and 2020-31, and hereby incorporate the WHEREAS clauses of those Executive Orders;

**THEREFORE**, by the powers vested in me as the Governor of the State of Illinois, pursuant to the Illinois Constitution and Sections 7(1), 7(2), 7(3), 7(8), 7(9), and 7(12) of the Illinois Emergency Management Agency Act, 20 ILCS 3305, and consistent with the powers in public health laws, I hereby order the following, effective April 30, 2020:

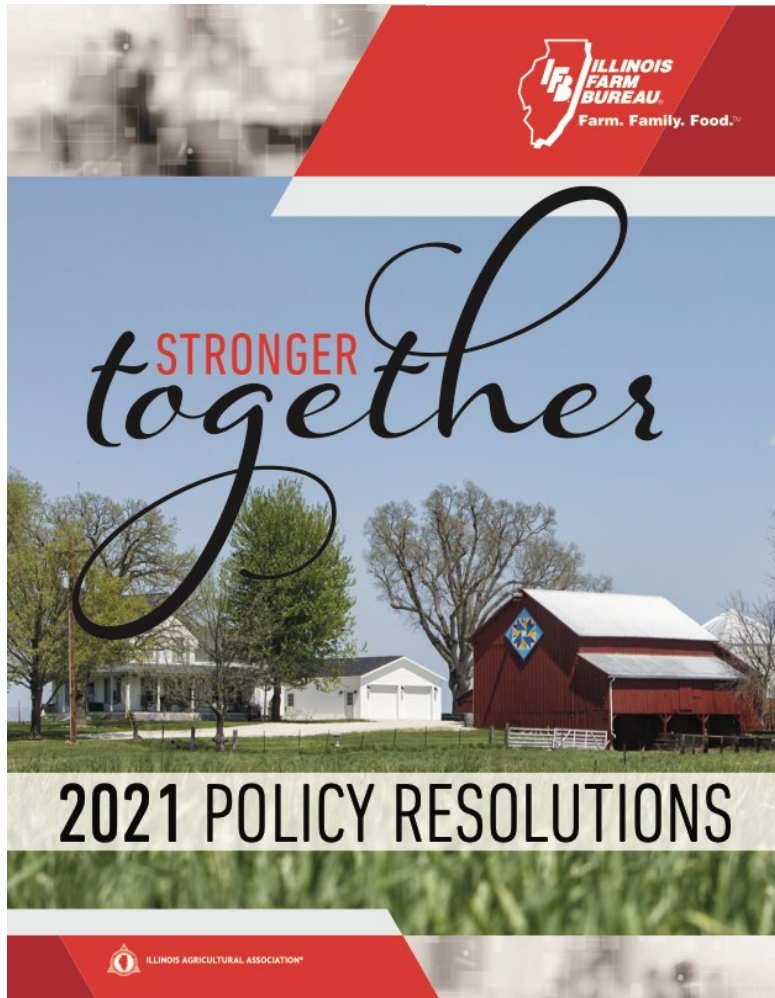
**Part 1: Re-Issue of Executive Orders.**

Executive 2020-03, 2020-04, 2020-05, 2020-06, 2020-07, 2020-08, 2020-09, 2020-11, 2020-12, 2020-13, 2020-14, 2020-15, 2020-16, 2020-17, 2020-19, 2020-20, 2020-21, 2020-22, 2020-23, 2020-24, 2020-25, 2020-26, 2020-27, 2020-28, 2020-29, 2020-30, and 2020-31 hereby are re-issued by this Executive Order 2020-33 as follows:





## February 2021: Farm Bureau support



- 1 3. Efforts to provide information to farmers on proven means of improving the efficiency of
- 2 inputs.
- 3 4. Research to study soil health and its future productivity.
- 4 5. The use of an integrated pest management program to control pests in crop production.
- 5

6 We oppose any attempt to mandate low input methods of farming.

### 25. FORESTRY

12 We support:

- 13 1. Incentives for the development of private forest resources in Illinois.
- 14 2. The planting of trees on land that is unable to meet conservation compliance standards to
- 15 help control soil erosion and increase timber resources.
- 16 3. The research and monitoring of forest health.
- 17

### 26. GLOBAL CLIMATE CHANGE

22 We support:

- 23 1. Science-based research and economic analysis, not cultural consensus, to conclusively
- 24 determine the causes and impacts of global climate change.
- 25 2. Scientific research to document the continuous improvement and beneficial impact of
- 26 agricultural efforts to date with regard to increasing climate resiliency, improving water
- 27 quality and soil health, sequestering carbon in the soil, and preventing soil erosion.
- 28 3. A campaign to communicate to the general public and policy makers about the continuous
- 29 improvement and beneficial impact of agricultural efforts to date with regard to increasing
- 30 climate resiliency, improving water quality and soil health, sequestering carbon in the soil,
- 31 and prevent soil erosion.
- 32 4. Expanding and improving state and federal conservation programs that allow farmers to
- 33 voluntarily adopt conservation practices that increase climate resiliency, improve water
- 34 quality and soil health, sequester more carbon in the soil, and prevent soil erosion.
- 35 5. Market-based solutions that establish economic incentives for farmers to voluntarily adopt
- 36 conservation practices that increase climate resilience, improve water quality and soil
- 37 health, sequester more carbon in the soil, and prevent soil erosion.
- 38 6. Increased funding for research of farming practices that mitigate climate change while
- 39 maintaining farm profitability, as well as technical assistance and educational efforts that
- 40 ensure the research outcomes are transferred effectively to farmers.
- 41 7. Farmers to voluntarily improve on-farm energy efficiency.
- 42 8. Improvements to the current electric grid.
- 43 9. Use of a broad spectrum of power sources like renewables, biofuels and nuclear power to
- 44 help facilitate the market-derived cost of energy.
- 45 10. Federal level climate change policy that reflects regional variations.
- 46

47 We oppose:

- 48 1. Any regulations or treaties relative to global climate change that will unfairly impact U.S.
- 49 agriculture and the U.S. economy.
- 50 2. Penalizing equipment like semi-trucks or farm machinery for consuming fossil fuels.
- 51 3. Penalizing animal agriculture for emissions related to their consumption and digestion of
- 52 feed.
- 53 4. A state-by-state patchwork of climate change policies.
- 54
- 55
- 56

Market-based solutions that establish economic incentives for farmers to voluntarily adopt conservation practices that increase climate resilience, improve water quality and soil health, sequester more carbon in the soil, and prevent soil erosion.



## July 2021: Illinois Environmental Council support



July 9th, 2021

Director John Kim  
Illinois Environmental Protection Agency  
1021 North Grand Ave. East  
P.O. Box 19276  
Springfield, IL 62794-9276

**Re: Illinois' Opportunity to Accelerate Water Quality Progress and Expand Rural Investment**

Director Kim,

We want to share our support for the approach that the Northern Morrain Sewerage District is proposing for a watershed approach to nutrient reduction. This is a newer approach to water quality compliance that is emerging in Iowa, championed by the Sand County Foundation and the Environmental Policy & Innovation Center. It gives municipalities and water utilities the ability to offset permitted nutrient discharge limits through watershed-scale water quality improvements, rather than just engineered point source treatment.

Iowa cities and towns like Dubuque, Cedar Rapids, Ames, and Storm Lake negotiated Memoranda of Understanding with the Iowa DNR, their state water quality regulator. These agreements create enough regulatory certainty about the quantitative value of projects in the watershed to allow those cities and towns to make investments today in rural water quality projects within their watersheds.

Meanwhile in Wisconsin, more than 50 permit plans and agreements are in place that allow watershed work to count toward permit compliance. Permit holders can choose to offset their nutrient impacts with specific watershed-based projects through trading, or to build holistic adaptive management programs to achieve watershed quality permit requirements. In either case, partnerships are essential, and traditional urban/rural barriers are reduced. Money flows into the rural area to implement and enhance conservation practices on farms.

In September 2020, USDA announced a new \$7.3 million investment in ReHarvest Partners, an effort that had already attracted millions in private investment. That Fund will pay for farmer-led water quality projects, including some in Illinois, and trade the resulting modelled nutrient reductions with NPDES permit holders to meet some of their compliance needs.

Illinois has entertained the idea of such watershed approaches but very little has been done to create a system where agriculture offsets can fit into our regulatory system. We believe that creating such a mechanism will take a collaborative effort to calibrate a system that works to the benefit of us all, but that at some point we have to get started. We believe the opportunity is present with this Memorandum of Understanding concept being proposed by Sand County Foundation and EPIC.

Sincerely,

Jennifer Walling,  
Executive Director

# July 2021: Illinois Association of Wastewater Agencies support



Illinois Association of Wastewater Agencies  
241 NORTH FIFTH STREET  
SPRINGFIELD, ILLINOIS 62701  
PHONE: 217-523-1814 FAX: 217-544-0086  
WEBSITE: [www.ilwastewater.org](http://www.ilwastewater.org)

July 12, 2021

President  
**BRANDON JANES**  
Village of Deerfield  
Deerfield, Illinois

Vice President-Administration  
**JENNIFER WASIK**  
Metropolitan Water Reclamation  
District of Greater Chicago  
Chicago, Illinois

Vice President-Technical  
**MIKE HOLLAND**  
Kankakee Water Reclamation  
District

Member-at-Large  
**KAY ANDERSON**  
American Bottoms Regional  
Wastewater Treatment Plant  
Sagest, Illinois

Member-at-Large  
**MATT STREICHER**  
Glenbard Wastewater Authority

Member-at-Large  
**MONTE CHERRY**  
Danville Sanitary District  
Danville, Illinois

Member-at-Large  
**MARSHALL SCHRADER**  
Galesburg Sanitary District

Ex-Officio  
**BETH VOGT**  
Fox River Water Reclamation District  
Eggs, Illinois

Executive Director  
**KEVIN BURKE III**  
Springfield, Illinois

Mr. John Kim  
Director  
Illinois Environmental Protective Agency  
1021 North Grand Ave., East  
Springfield, IL 62702

Dear Mr. Kim:

The Illinois Association of Wastewater Agencies (IAWA) would like to offer our support for the Sand County Foundation & Environmental Policy Innovation Center's Memorandum of Understanding concept for nutrient trading in the State of Illinois. We further support and encourage the potential pilot project/program with the Northern Moraine Wastewater Reclamation District. As you may be aware, IAWA member agencies provide water reclamation services for over 85% of the population of the State of Illinois. IAWA recognizes that a variety of approaches will be necessary to address nutrient issues in the state.

Should you have any questions or would like to further discuss our thoughts on opportunities to engage with the agricultural industry to meet nutrient reduction goals of the State please feel free to reach out to me ([bjanes@deerfield.il.us](mailto:bjanes@deerfield.il.us)) or Rick Manner ([rmanner@u-csd.com](mailto:rmanner@u-csd.com)).

Sincerely,

Brandon Janes, President  
Illinois Association of Wastewater Agencies

BJ:rd

cc: Sanjay Sofat



# August 2021: Northern Moraine WRD submission of formal request



August 10, 2021

Darin LeCrone- Permit Section Manager  
Brant Fleming- Manager, Municipal Unit  
Illinois Environmental Protection Agency  
1021 N. Grand Ave. E.  
Springfield, IL 62702

Re: Watershed work for permit compliance (nutrient reduction)

Dear Mr. LeCrone and Mr. Fleming,

We are submitting a draft Memorandum of Understanding between the Northern Moraine Wastewater Reclamation District (NMWRD) and the Illinois EPA that will allow our facility to meet its nutrient reduction requirements by working with partners in the watershed. This is a tool developed by the Sand County Foundation and is similar to what is in use in Iowa for their nutrient reduction goals.

The concept is simple, and the tools developed around modeling nutrient reduction in landscape management make it viable to consider for permit purposes. This is a same-watershed approach where the goal is to clean up the water for the entire watershed, but using methods and management that have multiple benefits beyond just nutrient reduction at the plant's effluent pipe.

A tremendous amount of work has gone into the Nutrient Loss Reduction Strategy, the research into agricultural practices, the ability to determine field-specific nutrient loss reductions, and development of partnerships throughout Illinois between agriculture, environmental groups, and the wastewater associations. In every setting you see reference to "trading" as an option, including in the NARP settlement and the NIRS itself. However, no one seems to know how to start – and we believe this agreement provides a direct way to get watershed work recognized as an effective way for overall water quality improvement.

All the pieces are in place, and we believe our approach will give the cleanest, quickest path to taking the theory of trading and putting it into practice.

The Memorandum of Understanding (MOU) is written to create a basic offset program for nutrient reduction:

The MOU provides explicit agreement on how and when watershed investments would be "counted" by the Illinois EPA, primarily using the Nutrient Tracking Tool developed by the USDA and supported by the EPA. The "NTT" is used by the NRCS to quantify the site-specific (field-level) reductions in nitrogen, phosphorus and sediment due to new management and conservation techniques.

The MOU allows us to work directly with farmers to fund projects that become part of their compliance work, or to purchase the Nitrogen or Phosphorus reductions from completed projects that someone else has financed, such as the Soil and Water Outcomes Fund. All work must be in the same watershed as our treatment plant and follow the model designated by the agreement.



The MOU allows us to get credit for any project that meets certain conditions. It doesn't require preapproval of location-specific plans for any projects to be approved before work can begin.

The MOU creates a baseline for watershed work, allowing any projects that have a well-documented baseline to be counted toward requirements of a permit.

We look forward to further discussions with you about this opportunity for Illinois and our mutual work towards water quality.

NORTHERN MORAIN WRD

A handwritten signature in blue ink, appearing to read "Mohammed M. Haque".

Mohammed M. Haque  
District Manager

cc: Ken Michaels, President Board of Trustees  
Bartlett Durand, Sand County Foundation

Enc.

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**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
AND  
THE NORTHERN MORAINÉ WATER RECLAMATION DISTRICT**

This Memorandum of Understanding (MOU) between the Illinois Environmental Protection Agency (IL-EPA) and the Northern Moraine Water Reclamation District (NMWRD) is effective on the \_\_\_\_ day of \_\_\_\_\_, 2021.

1. **Purpose.** The purpose of this MOU is to establish a framework for the NMWRD to implement a watershed-based Nutrient Reduction Program within the upper Rock River watershed (Watershed), and credit quantifiable nutrient reductions for the benefit of the NMWRD's nutrient reduction targets through National Pollutant Discharge Elimination System (NPDES) permitting. The NMWRD may use this framework to achieve compliance with current and future permit requirements arising from the Illinois Nutrient Loss Reduction Strategy (NLRS), TMDLs or other regulatory requirements to reduce Nitrogen (N), Phosphorus (P) or Total Suspended Solids (TSS) at the NMWRD's wastewater plant. In exchange for utilizing this framework, the NMWRD shall receive certainty regarding compliance with future nutrient reduction permit requirements.
2. **Background.** Illinois developed a NLRS to reduce excess nutrients in Illinois's surface waters and tasked wastewater treatment plants with specific nutrient reduction goals. The NLRS supports work at the watershed scale, including the development of water quality credit trading between two or more entities, commonly a point source which is mandated to achieve a permit goal and one or more nonpoint sources who voluntarily collaborate with the point source to reduce the amounts of nitrogen and phosphorus entering a water body. Trading can provide a means to improve water quality, especially in cases where the technology does not exist or is not affordable or feasible to allow a point source discharger to comply with permit requirements or where the same or greater pollutant reductions can be achieved more quickly or at lower cost through implementing Best Management Practices (BMPs) or other nutrient reduction efforts.<sup>1</sup> In addition, working at the watershed scale can offer many other environmental and social benefits beyond just reduction of N and P in the waters. The IL-EPA continues to promote trading, urban and rural partnerships, and other offsets as part of watershed planning and implementation efforts.<sup>2</sup>

---

<sup>1</sup> The United States Environmental Protection Agency supports water quality trading, offsets and similar programs to achieve compliance with regulations, in particular using land management strategies for implementing market-based programs within a watershed, as most recently stated in the EPA February 6, 2019 Memorandum titled "Updating the Environmental Protection Agency's (EPA) Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality."

<sup>2</sup> Illinois NLRS Biennial Report (2019) at 120.



**Currency:** MOUs provide explicit agreement on how and when watershed investments would be “counted” by the state regulator (in this case, quantified through the “NTT” model). When a community wants to use watershed projects in a future permit, the value of nutrient improvements is clear.

**Partnerships:** MOUs either make clear that cities will work directly with farmers to fund projects that become part of their compliance work, or that cities can purchase the Nitrogen or Phosphorus reductions from completed projects that someone else has financed, such as the Soil and Water Outcomes Fund.

**Flexibility:** MOUs allow cities or towns to get credit for any future project that meets certain conditions. They don’t need a prior, location-specific plan for all of their projects to be approved before work can begin. Agreements create a baseline for watershed work, allowing any projects that have a well-documented baseline to be counted toward requirements of a future permit. These conditions speed up investment in watershed work so more progress is made, even while bigger negotiations over treatment upgrades or other work are ongoing.





# Iowa at the center of attention

Official website of the United States government: [http://www.epa.gov/hypoxia](#)

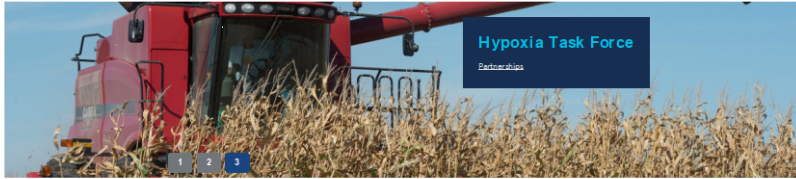
**EPA** United States Environmental Protection Agency

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## Mississippi River/Gulf of Mexico Hypoxia Task Force



**Hypoxia Task Force**  
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### MOVING FORWARD

- [2008 Action Plan](#)
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### Resources

- [Important HTF Documents](#)
- [Fact Sheets](#)
- [Related Legislation](#)
- [Additional Resources](#)
- [Meetings and Events](#)
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### HTF Meetings

- The Hypoxia Task Force held a Virtual 2021 Public Meeting on Tuesday, December 14. View materials from the HTF Public Meeting [here](#).
- Meeting materials from all past HTF Meetings, including the Virtual 2021 Public Meeting are posted [here](#).


### In the Spotlight

#### In the Spotlight

- [Hypoxia Task Force Newsletter - January 2022](#)
- [October 2019 Report on Point Source Progress in HTF States](#)
- [EPA Provides \\$12 Million to HTF States](#)
- [Recent Gulf Dead Zone Measurement](#)
- [Report on Nonpoint Source Progress in HTF States](#)
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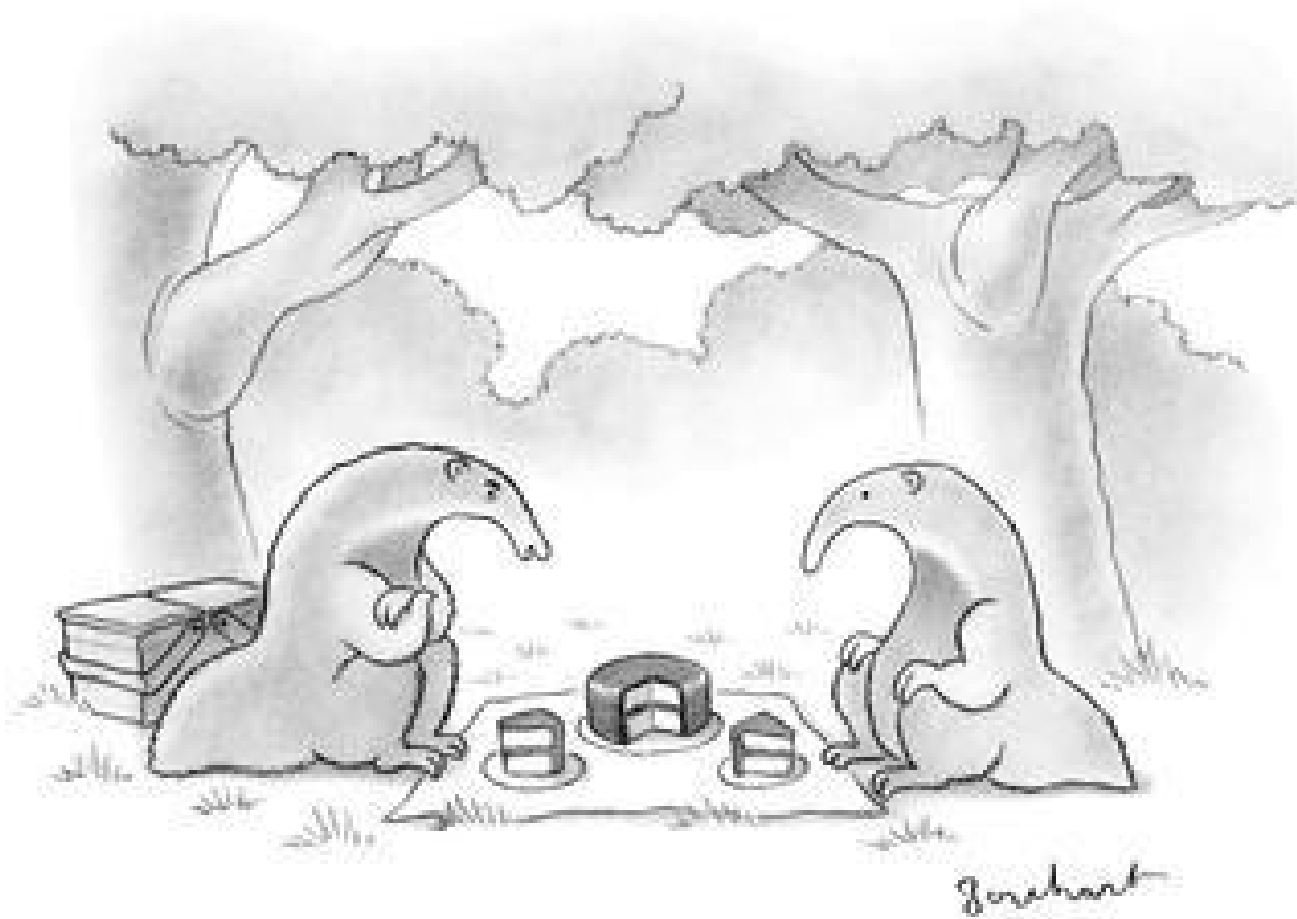
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LAST UPDATED ON FEBRUARY 11, 2022





*"Now we wait."*

New Yorker Magazine, Sept. 9, 2013





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<https://sandcountyfoundation.org/our-work/wildlife-habitat/municipal-ag-watershed-partnerships>





MORPC

# Agricultural and Rural Communities Outreach Working Team Update

Brian Brandt, Chair





MORPC

# Featured Presentation

*Dr. Hamilton, Ohio State University*

**“Farmer and Non-Farmer Stakeholder Engagement in the Scioto Watershed:  
Findings from OSU Capstone Projects”**

# Farmer and Non-Farmer Stakeholder Engagement in the Scioto Watershed: Findings from OSU Capstone Projects

Matt Hamilton (on behalf of OSU Capstone students)

School of Environment and Natural Resources, OSU

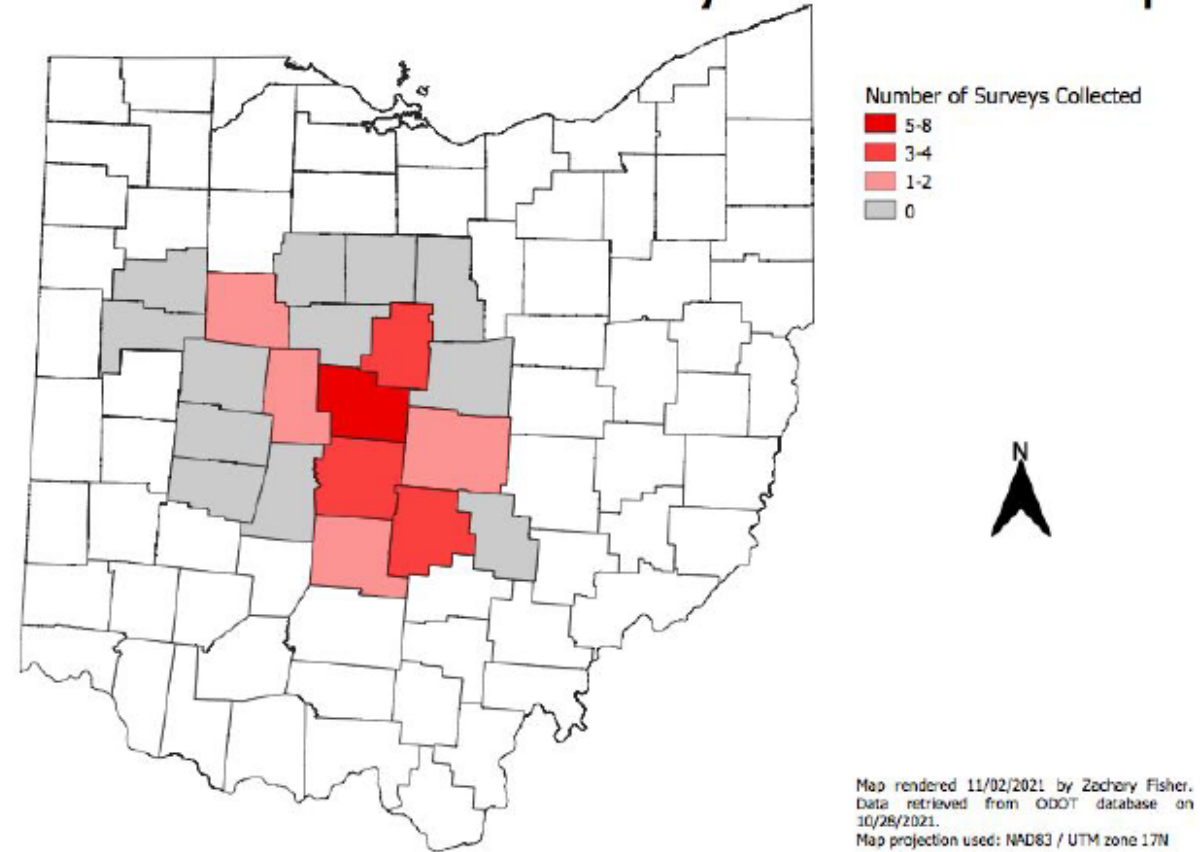
[hamilton.1323@osu.edu](mailto:hamilton.1323@osu.edu)

February 23, 2022

# Study 1: Farmer engagement

- Surveys distributed to farmers within the watershed
- Distributed at Delaware County Fair, virtually distributed by county Farm Bureaus, and through personal connections.
- 28 surveys received

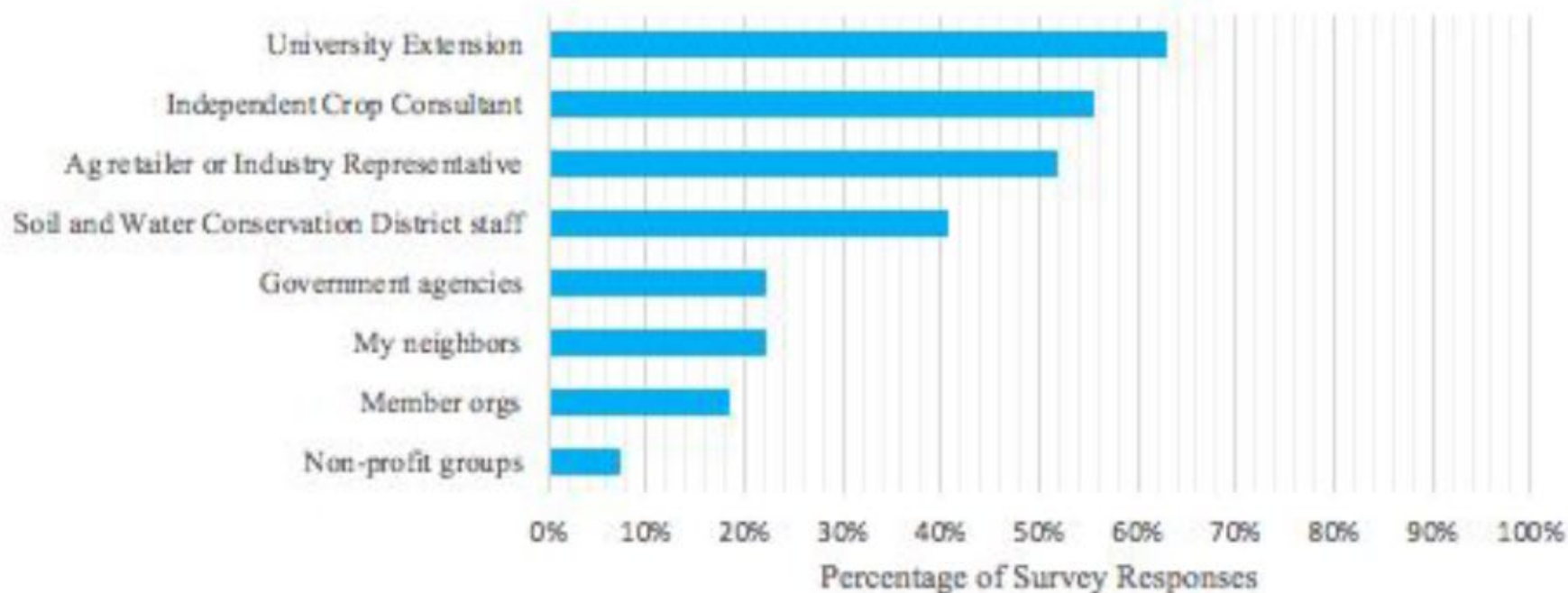
Upper Scioto Watershed Survey Distribution Map



## Rank the top 3 groups you receive the most trusted information or technical assistance from

- University Extension, Independent Crop Consultants, and Ag Retailers/Industry representatives checked as top three trusted sources of information
- Nonprofits put in top three only twice

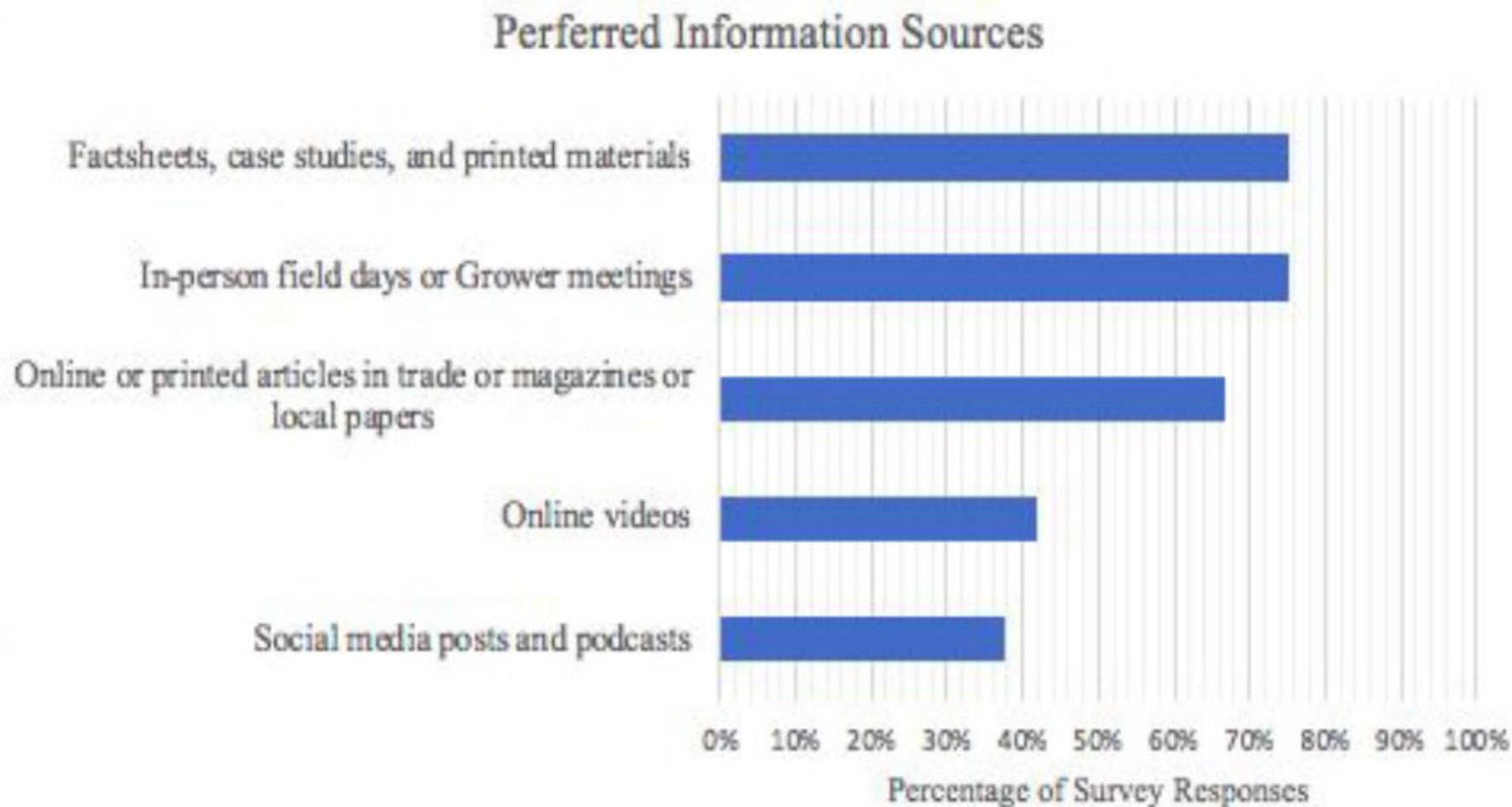
Most trusted sources of information or technical assistance





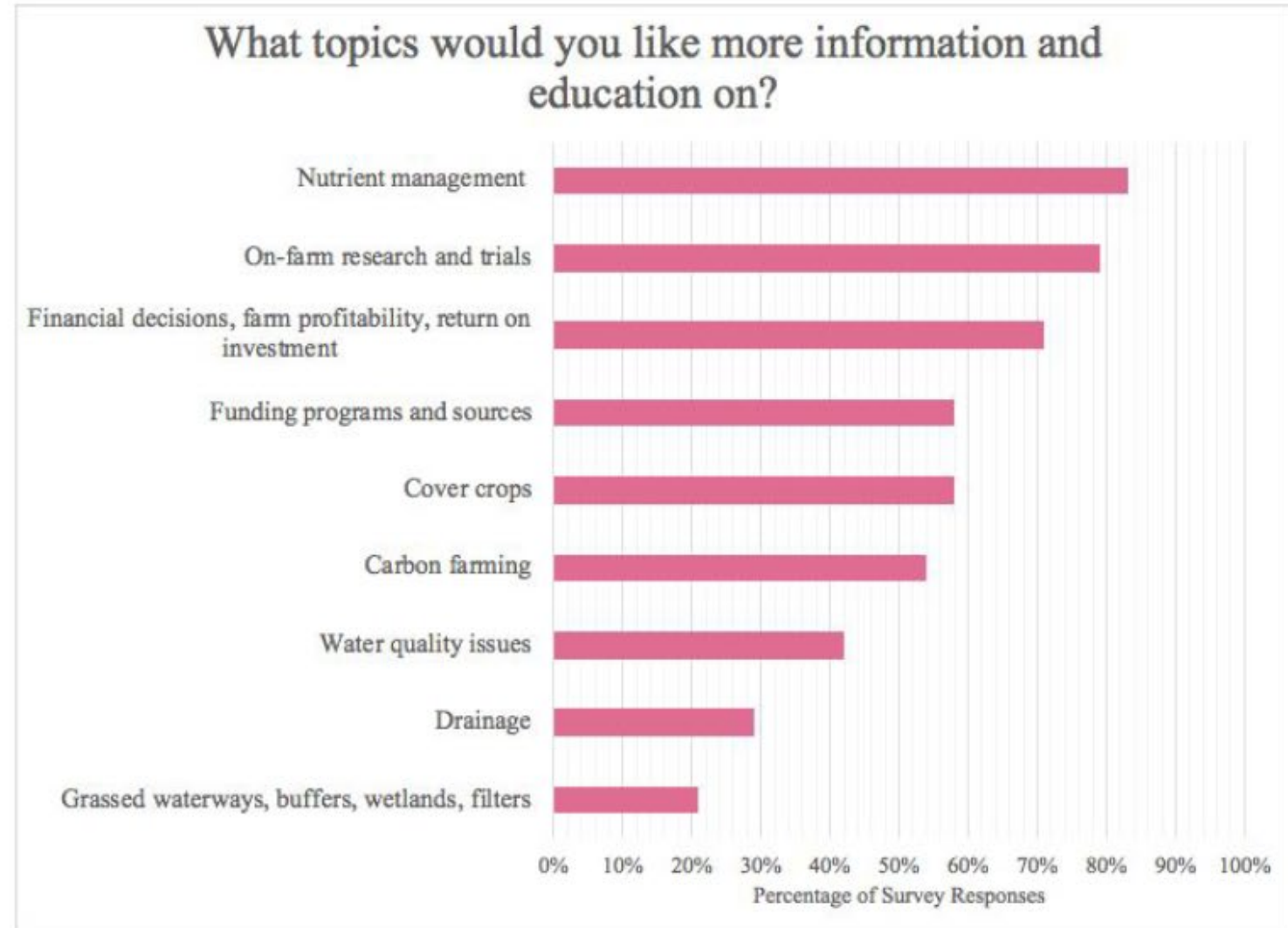
# Rank the top 3 ways you prefer to get information

- Factsheets, case studies, and printed materials; in-person field days or grower meetings; online or printed articles in trade magazines or local papers are in the top 3 for over 50% of respondents
- In-person field days or grower meetings was the most popular #1 choice - indicated by 9 respondents



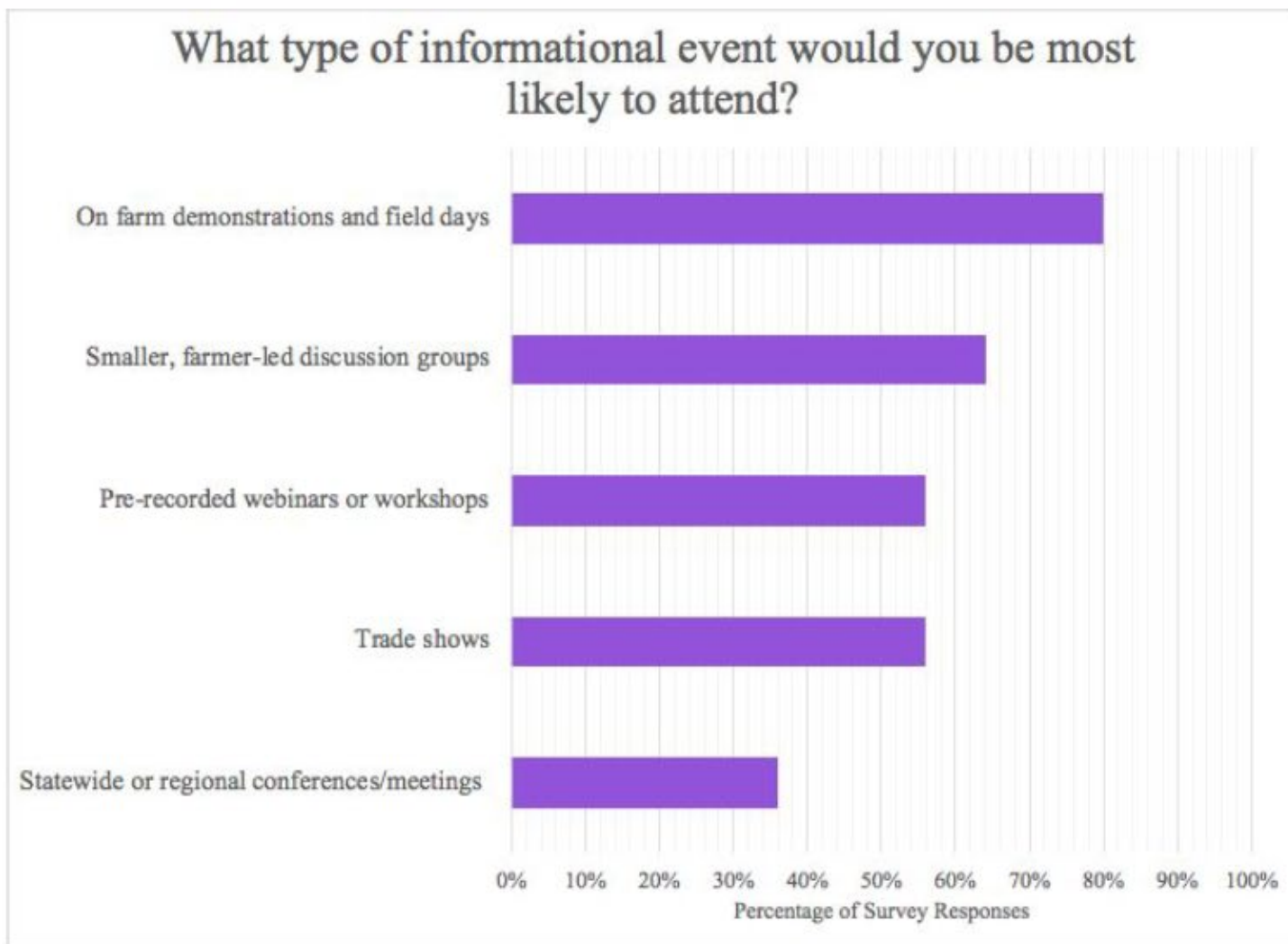
# What topics would you like more information and education on?

- Most respondents indicated they wanted more information on nutrient management and on-farm research
- Only 21% of respondents indicated an interest in learning more about grassed waterways, buffers, wetlands, and filters
  - It was also indicated previously that these are uncommon practices in respondents' communities





# What type of Informational Event would you be most likely to attend?



- 80% of respondents would attend on-farm demonstrations and field days
- Over ½ respondents are open to attending small farmer-led discussions, pre-recorded webinars/workshops, and tradeshows
- Less interest shown in larger conferences/meetings

# Recommendations

- Continue the outreach, possibly connecting with University Extension, with a fact sheet or in-person grower meeting
  - Target county fairs for future surveying as many of the leaders in the farming community will be in attendance and will have time to answer questions.
- Provide the information the farmers want- Nutrient Management, On Farm Research, Cover Crops- and **include financial information**
- Identify reason behind lack of interest in certain water quality management strategies such as wetlands and buffers, can funding help increase implementation?



## Study 2: Engagement with policy makers and other leaders

Semi-structured interviews with six leaders (e.g., County Commissioners) in Logan, Union, Madison, Pickaway, and Fairfield Counties

Goal: Understand perspectives on issues in the Watershed, as well as learn about policy preferences, goals, and desired forms of engagement with MORPC



**Question 2a:** *Do you consider the current quality of drinking water from the Scioto Watershed an issue and why?*

Preliminary Response	Respondents					
	A	B	C	D	E	F
Yes						
No						
Somewhat						
<b>Rationale/Concerns</b>						
Human activity within watershed						
Micro level (nutrient/stormwater runoff)						
Not enough research						
Not relevant to county						

**Question 2b:** *Do you consider the current ecological viability of the Scioto Watershed an issue and why?*

Response/Values	Respondents					
	A	B	C	D	E	F
Yes						
No						
Somewhat						
<b>Rationale/Concerns</b>						
Not enough information						
Microparticles (nutrient/stormwater runoff)						
Runoff from unknown sources						
Not clean enough for humans						
Not relevant to county						

**Question 4b:** *What environmental issues would you like to see addressed in your [County/town/organization]?*

Response/Values	Respondents					
	A	B	C	D	E	F
Restoration of wetlands and wet forests						
More engagement with landowners on restoration						
More groundwater regeneration and filtration						
In depth study on microparticles in streams and rivers (stream health)						
Better Management of Stormwater						
Increased green space and habitat connectivity						
Green Energy Economic Viability						
Improve Water Quality for Aesthetics/Human Use						



**Question 4c:** *What are the biggest barriers preventing action on issues in the watershed?*  
*(Economic reasons, farmer productivity, lack of interest, etc)*

Response/Values	Respondents					
	A	B	C	D	E	F
Lack of Education/Information						
Lack of Funds						
Tradition						
Lack of Interest						
Farmer/Economic Productivity						
Community Pushback						
Cross-Boundary Regulation Differences						
Political Emphasis on Human Development						

**Question 5:** *Since MORPC is always seeking new ideas for effective outreach and partnership building in the ag community, what topics and mediums of outreach would be most appealing to you and your colleagues?*

Recommendations for Future Engagement	Respondents					
	A	B	C	D	E	F
Partner with a Bridging Organization						
Communicate with Landowners						
Connect Rural and Urban Communities						
<b>Bridging Organization</b>						
OSU Extension Services						
Soil and Water Districts						
Agricultural Societies						

# Recommendations

- Work with bridging organizations, e.g., extension
- Increase education within communities
  - Need for greater availability of region-specific information (e.g., research)
  - Focus on models (e.g., success stories)
- Nuanced approaches for engagement/communication
  - Care needed for navigating perceptions of urban-rural divide

# Thank you!

hamilton.1323@osu.edu

**Glenn Marzluf**

*Chair*

Sustaining Scioto Board

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**Edwina Teye, Ph.D.**

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