Agriculture Water Quality Partnership Forum

Virtual Meeting
June 15, 2022

Illinois Department of Agriculture

Illinois Environmental Protection Agency

Illinois Extension
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

Roles

Moderator: *Michael Woods, IDOA*

Chat Manager: *Lisa Merrifield, Illinois Extension*

Technology Assistance: *Layne Knoche, Illinois Extension*

Meeting minutes: *Joan Cox, Illinois Extension*

Attendance

Please type your name and affiliation into the chat box.

ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

Agenda

10:00	**Welcome** *Michael Woods, Illinois Department of Agriculture*
10:05	**Partner Sharing Session:** Each organization may share a statement (7-10 minutes each).
11:30	**Goals of IL Climate-Smart Agriculture** *Michael Woods, IDOA* Open Discussion
11:45	**Biennial Report agriculture chapter data sources update** *Trevor Sample, IEPA*
Noon	**End**

The primer questions:

1. If you provide technical assistance, describe it, identify gaps and what is working or not working.

2. If you provide cost-share assistance, describe it, identify gaps and what is working or not working.

3. Based on NLRS ag implementation scenarios, we know we need to increase the pace and scale of practice adoption. Describe resources and partnerships for programs are you planning to implement in the next 3 years.

4. Looking on smaller scales, how can you catalyze practice adoption?

5. How can you engage the middle- to late-adopters to implement practices?

Partner Sharing Session

Each organization may share a statement (7-10 minutes each).

Confirmed:

1. *American Farmland Trust* ***(KRIS REYNOLDS)***
2. *Illinois Corn Growers Association* ***(GREG GOODWIN)***
3. *Illinois Farm Bureau* ***(LAUREN LURKINS)***
4. *Illinois Fertilizer & Chemical Association* ***(KEVIN JOHNSON)***
5. *Illinois Sustainable Ag Partnership* ***(JEAN BROKISH)***
6. *Nutrient Research and Education Council* ***(SHANI GOLOVAY)***
7. *Prairie Rivers Network* ***(CATIE GREGG)***
8. *The Nature Conservancy* ***(ADRIENNE MARINO)***
9. *Illinois Soybean Association* ***(MEGAN MILLER)***

Opportunity to share:

1. *Association of Illinois Soil and Water Conservation Districts*
2. *Illinois Association of Drainage Districts*
3. *Illinois Certified Crop Advisor Program*
4. *Illini FS*
5. *Illinois Land Improvement Contractors Association*
6. *Illinois Pork Producers Association*
7. *Illinois Society of Professional Farm Managers and Rural Appraisers*
8. *Metropolitan Water Reclamation District of Greater Chicago*

American Farmland Trust

Kris Reynolds

American Farmland Trust

American Farmland Trust's Comments for the Agriculture Water Quality Partnership Forum

June 15, 2022

Kris Reynolds, Midwest Regional Director

American Farmland Trust

American Farmland Trust's mission is to save the land that sustains us by protecting farmland, promoting sound farming practices, and keeping farmers on the land

American Farmland Trust

**** More than $4.6 million has been invested in conservation practices ****

Partner Coordination

USDA United States Department of Agriculture
Natural Resources Conservation Service

Ford County Soil & Water Conservation District

Livingston County Soil & Water Conservation District

PCM Precision Conservation Management

THE WETLANDS INITIATIVE

Macoupin County Farm Bureau

Illinois Stewardship Alliance Local Food Matters

Macoupin County Soil & Water Conservation District

M&M Service Company

CHS

Illinois Environmental Protection Agency

Blackburn College Learn. Work. Earn.

Soil Warrior

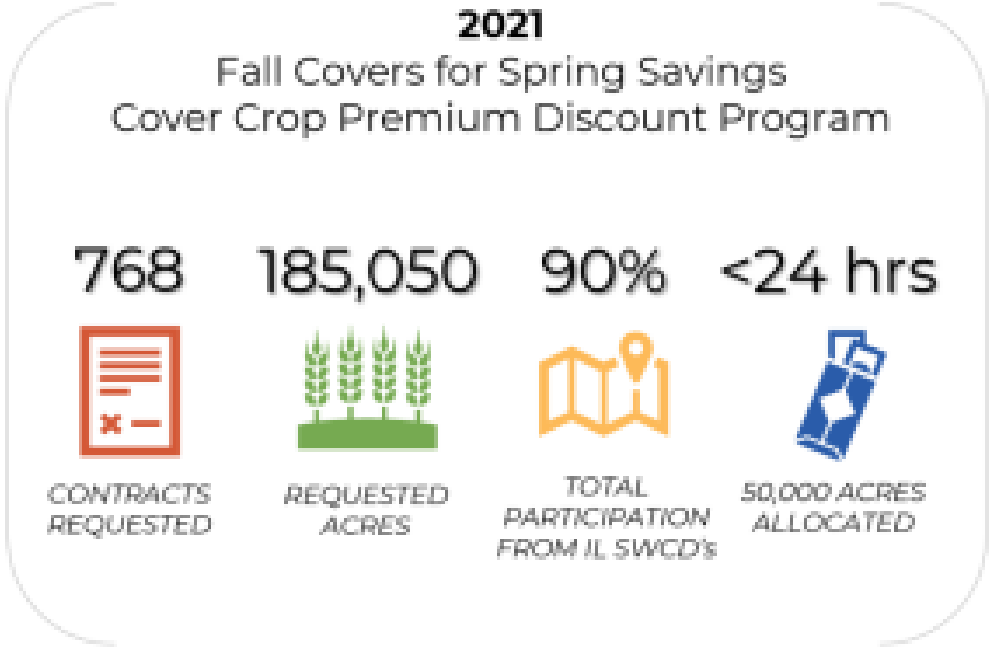
ETS Environmental Tillage Systems

Illinois Corn Growers Associaton www.ilcorn.org

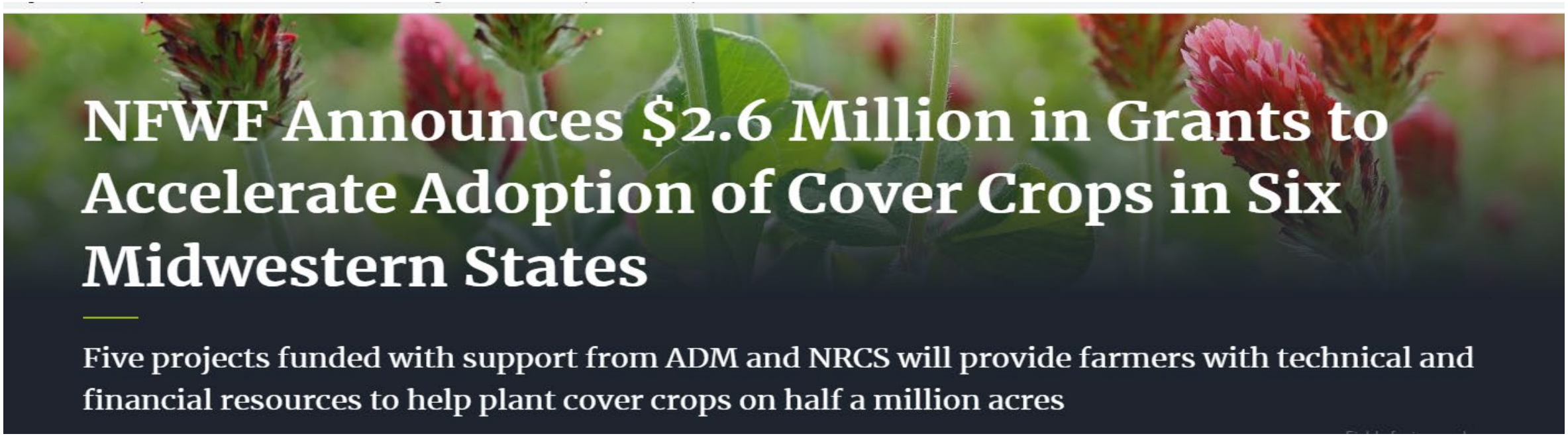
Illinois Department of Agriculture

American Farmland Trust

American Farmland Trust



533,282 acres were enrolled in the Pandemic Cover Crop Program in Illinois for the 2021 crop year



Illinois Cover Crop Initiative

- 75,000 acres in Illinois by December 1, 2022
- 1-4 year contract options with $10/acre/year incentives
- New and existing acres are eligible

American Farmland Trust

American Farmland Trust

What we need to scale up NLRS work

- Leadership & coordination
- Strengthen local champions
- Update policy guidance and financial frameworks
- Secure long-term stable funding
- Track Outcomes
- Invest in research and adaptative management

American Farmland Trust

Illinois Corn Growers Association

Greg Goodwin

June 2022 Update

- PCM
  - Results in Prairie Farmer
  - Expansion, Potential USDA Grant Opportunities
  - Open Positions
- Water Testing Program
  - Partnering with ISA this year, contest format with IL FFA Chapters
- Cover Crop Coupon
  - Again offering a coupon on cover crop seed with CC Seed Dealer partners- willing to add additional partners
  - Finalizing details of a new incentive program
- 50th Anniversary
  - Celebration Aug 8

ILCORN
WWW.ILCORN.ORG

Illinois Farm Bureau

Lauren Lurkins

Illinois Fertilizer & Chemical Association

Kevin Johnson

Illinois Sustainable Ag Partnership

Jean Brokish

ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

ILLINOIS
SUSTAINABLE
AG PARTNERSHIP

June 15, 2022

Jean Brokish

Ag Water Quality Partnership Forum

Coalition
15
members

ISAP's mission is to create a network to support a systems approach to improve soil health and reduce nutrient loss.

ISAP's THEORY OF CHANGE

Core Strategies
How do we create our desired impact?

- Increase farmer recognition in the ECONOMIC VALUE of conservation practices
- Serve as clearinghouse for SOIL HEALTH & CONSERVATION DRAINAGE EDUCATION
- Accelerate the ADOPTION OF CONSERVATION PRACTICES that improve soil health, carbon cycling & water quality

Enabling Outcomes
What is needed to bring about change?

- Farmers and advisors have access to data and view ISAP as a trusted source of information.
- All education is action oriented, fosters knowledge transfer, and motivates change on the landscape.
- ISAP members and partners are using a consistent message to inform and engage key audiences.
- Policies and funding priorities are supporting practices with the biggest water quality and climate impacts.

Desired Impact
What is our "long-term" goal?

ILLINOIS SUSTAINABLE AG PARTNERSHIP

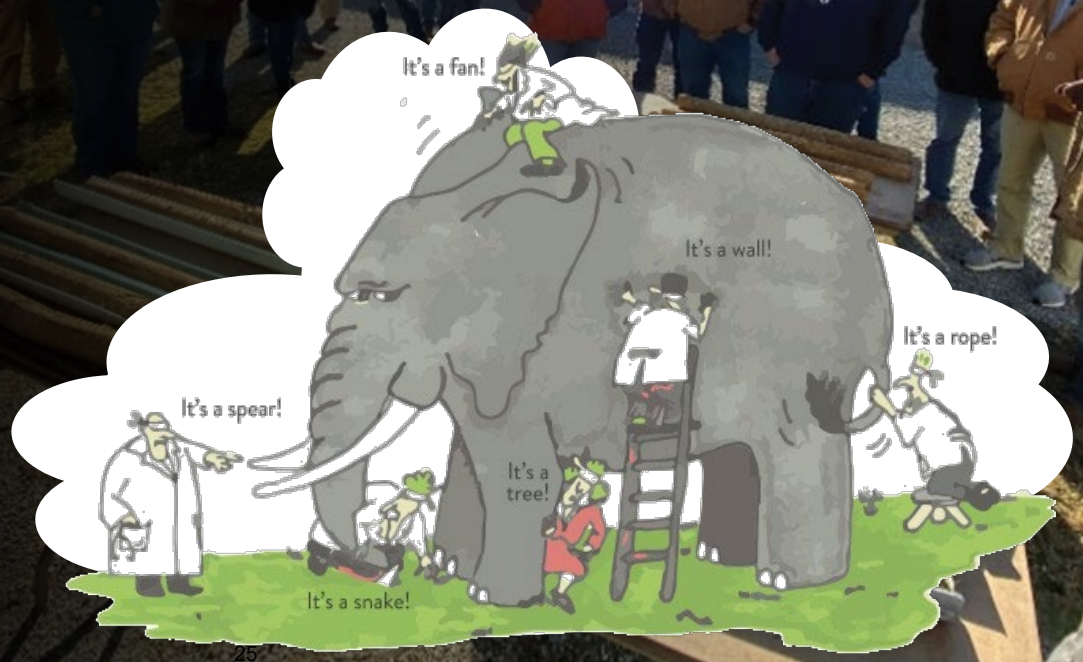
Illinois agriculture voluntarily meets NLRS goals and benefits from being part of the climate solution

Guiding Principles

- Collaboration - Public & Private Partnership
- Data Sharing
- Resource Sharing
- Prioritization

Data Sharing / Transparency

- Tracking progress (dashboard)
- Collaboration across NLRS committees



Climate

- Increased emphasis on benefits of practices for climate

Practice Approval & Adoption

- Drainage Water Management
- Prioritized Funding
  - Coordinate State and Federal

Bigger Picture

Creative Thinking
Innovations
Funding
Prioritization
Collaboration
Common Purpose

Illinois agriculture voluntarily meets NLRS goals and benefits from being part of the climate solution

TO LEARN MORE / JOIN US!

ILSUSTAINABLEAG.ORG

ILSUSTAINABLEAG@GMAIL.COM

217-281-1822

https://www.facebook.com/ilsustainableag

Illinois Nutrient Research and Education Council

Shani Golovay

Prairie Rivers Network

Catie Gregg

Drinking Water and the NLRS

Catie Gregg, Agriculture Programs Specialist

prairierivers network

How do people connect to nutrient pollution?

		EXT CONC	VERY CONC	SMWT CONC	NOT TOO CONC	(DK/NA)	*EXT/ VERY*
[ ]a.	Nitrogen and phosphorus pollution	27%	21%	24%	16%	11%	*48%*
[ ]b.	Animal fecal bacteria waste	26%	18%	26%	24%	5%	*44%*
[ ]c.	Sewage pollution	31%	25%	23%	15%	6%	*56%*
[ ]d.	Polluted runoff	27%	28%	26%	13%	6%	*55%*
[ ]e.	Manure pollution	21%	18%	29%	24%	7%	*39%*
[ ]f.	Nutrient pollution	17%	21%	28%	23%	12%	*38%*
[ ]g.	Stormwater runoff	14%	18%	32%	30%	6%	*32%*
[ ]h.	Sewage discharges	29%	25%	26%	15%	6%	*54%*
[ ]i.	Agricultural runoff	20%	24%	30%	19%	7%	*44%*
[ ]j.	Farm fertilizer contaminating local drinking water	34%	23%	22%	16%	5%	*57%*

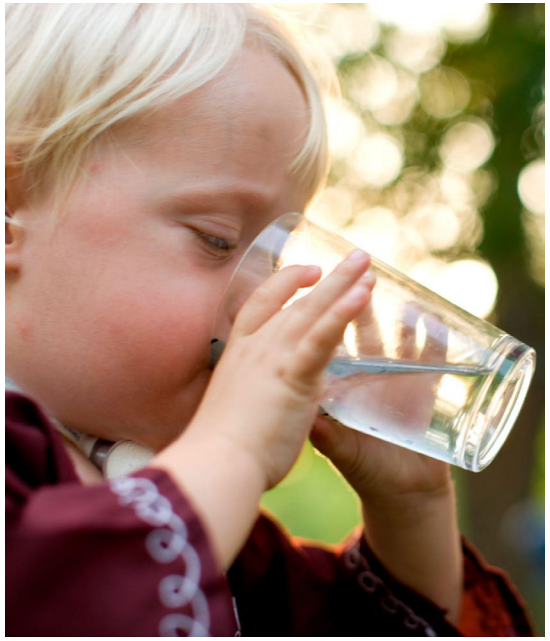
FM3 Research. (2020). ILLINOIS NUTRIENT POLLUTION ISSUES SURVEY

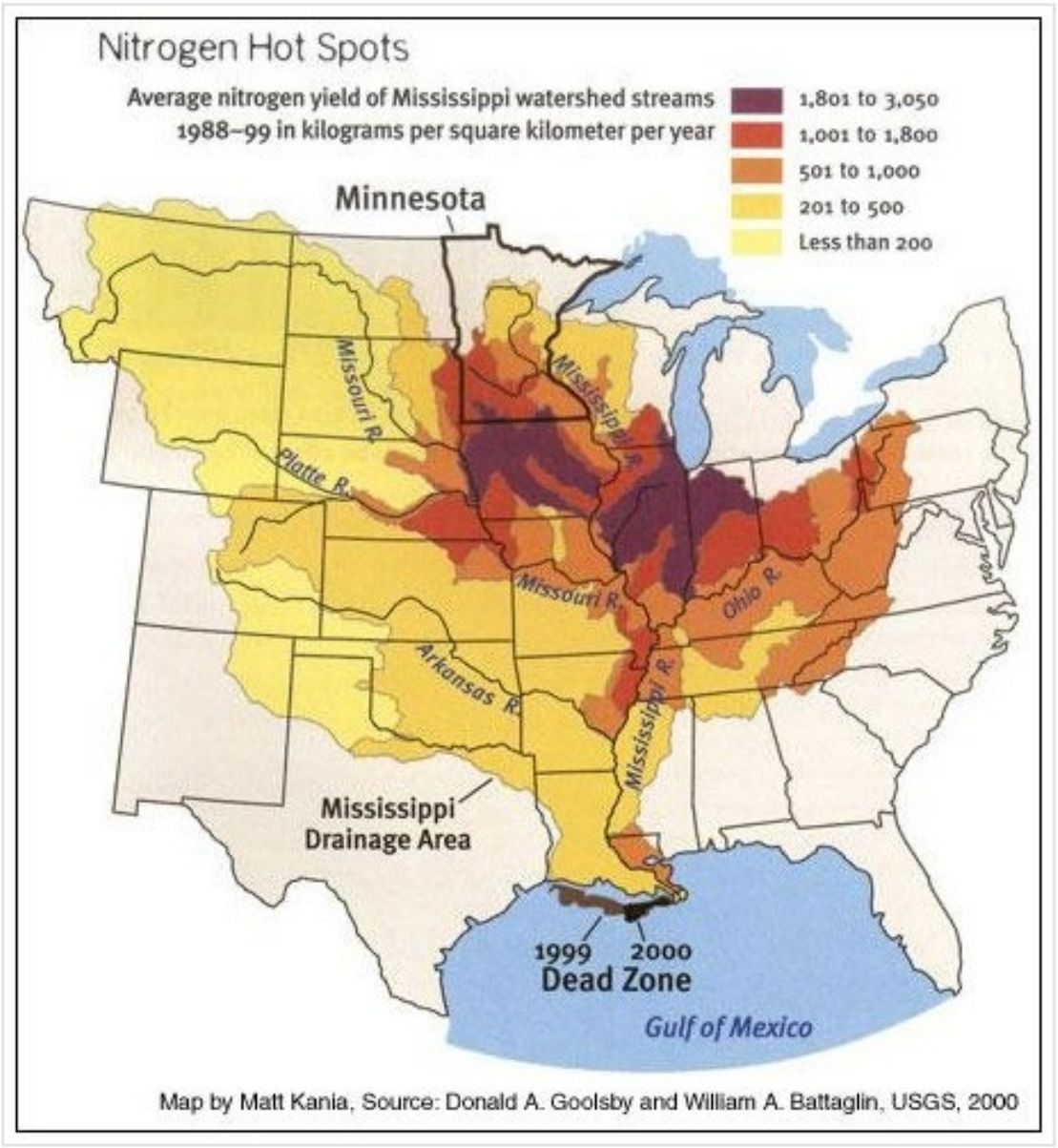
Drinking water concerns

Safe Drinking Water Standard : 10 mg/L Nitrate-N

Methemoglobinemia: Blue Baby Syndrome

Concerns around chronic exposure for broader populations





Where Illinois stands out

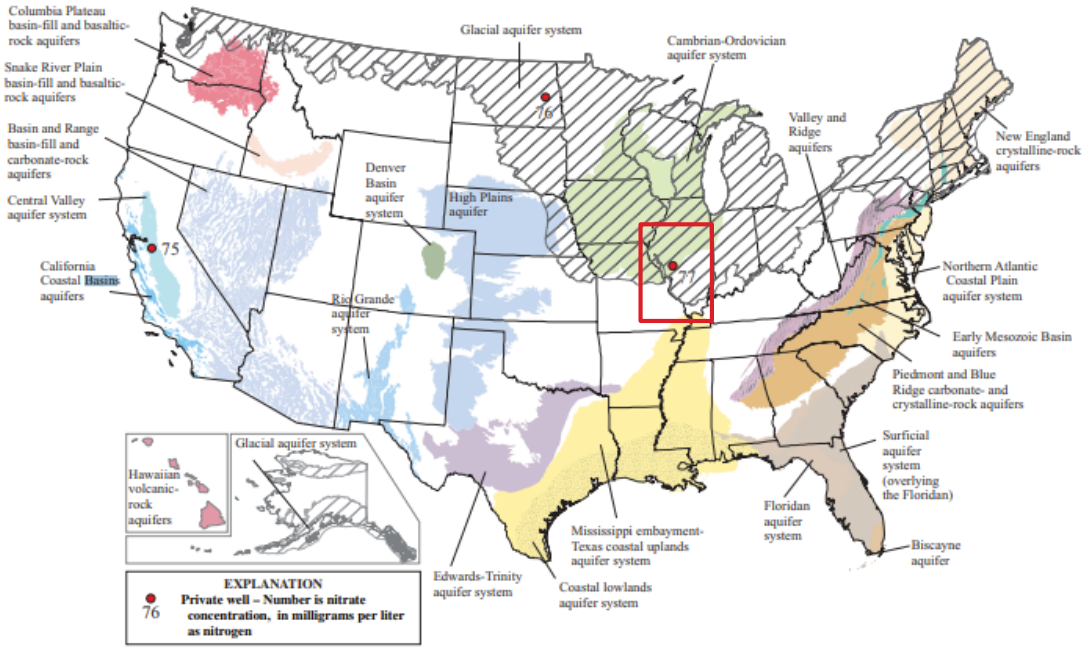


Figure 4–1. Locations of U.S. Geological Survey National Water-Quality Assessment (NAWQA) program regional assessments in principal aquifers in the United States. The glacial aquifer system covers about 953,000 square miles and parts of 26 States. The two highest concentrations of nitrate in private wells measured during the NAWQA program (1995–2005) were in water from the glacial aquifer system

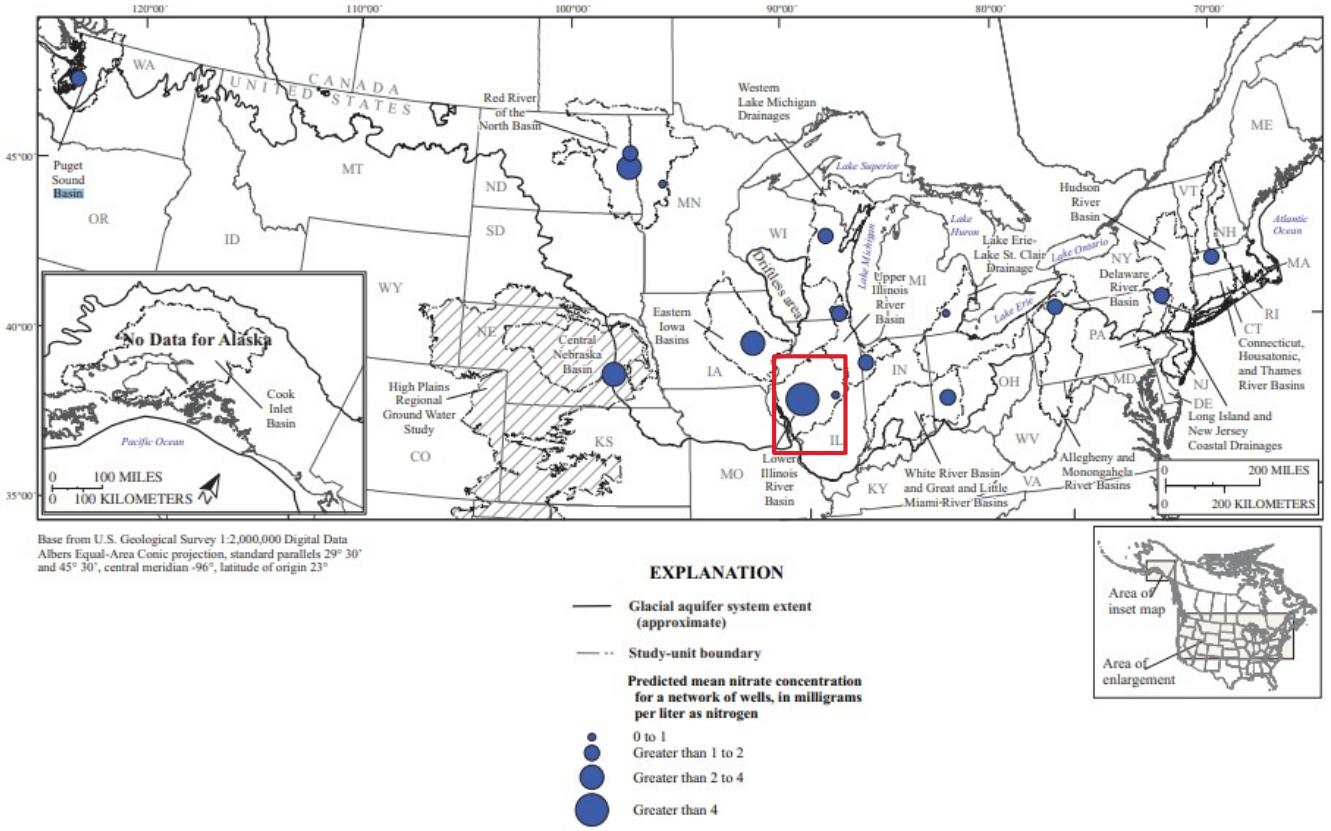


Figure 10–3. The area of highest predicted mean nitrate concentration in water from private wells in the glacial aquifer system is in the glacial deposits in west-central Illinois.

How does it show up?

- Low average nitrate level ~1 mg/L
- Hotspots with the highest levels in the nation

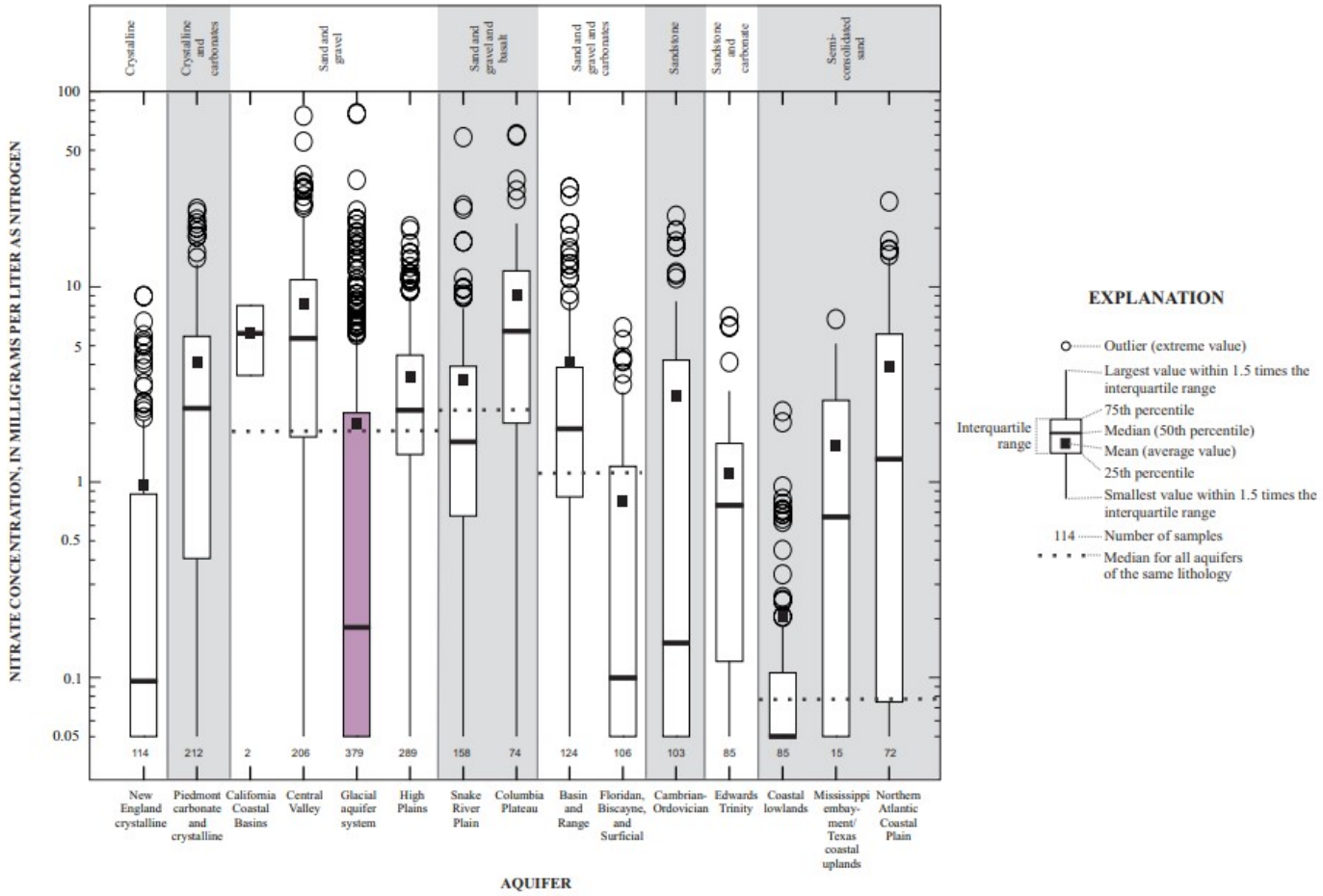


Figure 4–2. Although the glacial aquifer system had a larger range of nitrate plus nitrate concentration compared to other principal aquifers, the median concentration of nitrate was relatively low. Concentration of nitrate plus nitrite as nitrogen measured in water from private and public-supply wells in selected principal aquifers and other aquifers of different lithologies sampled as part of the U.S. Geological Survey National Water-Quality Assessment (NAWQA) Program (1995–2005) are shown.

Connecting watershed constituents through drinking water

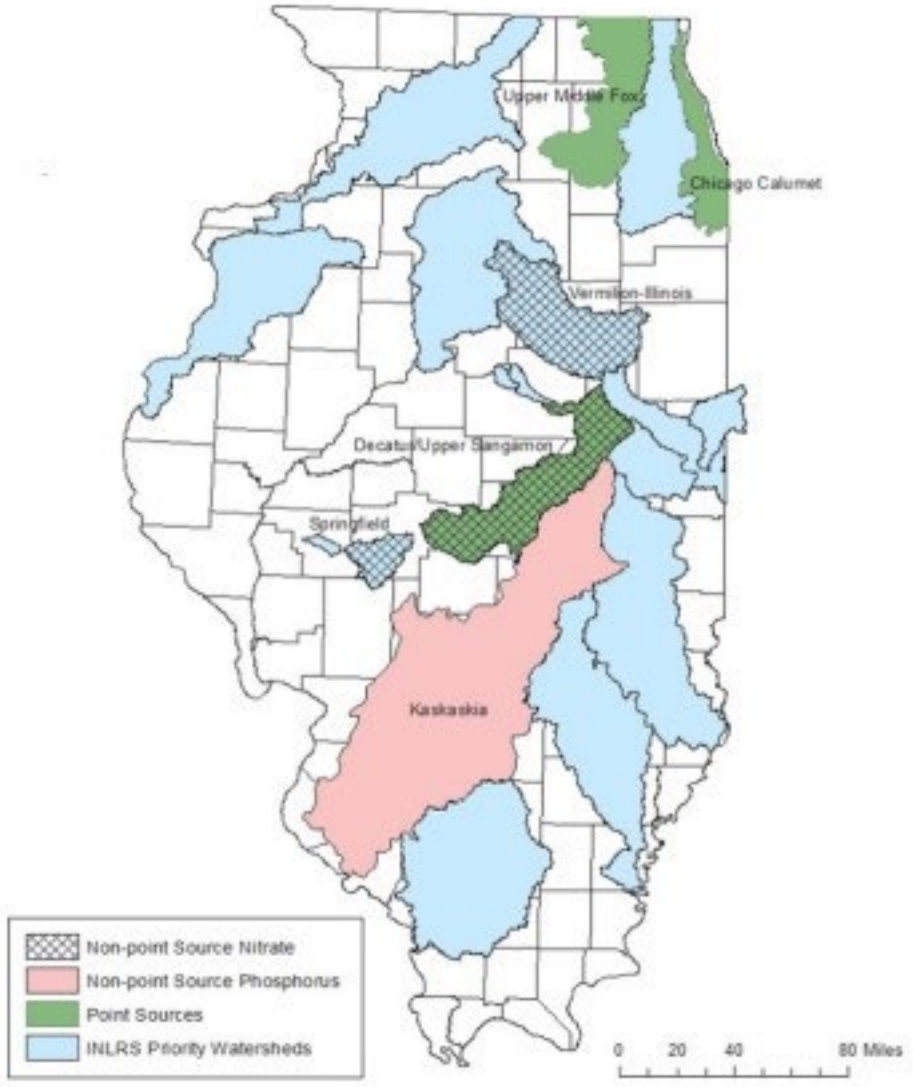
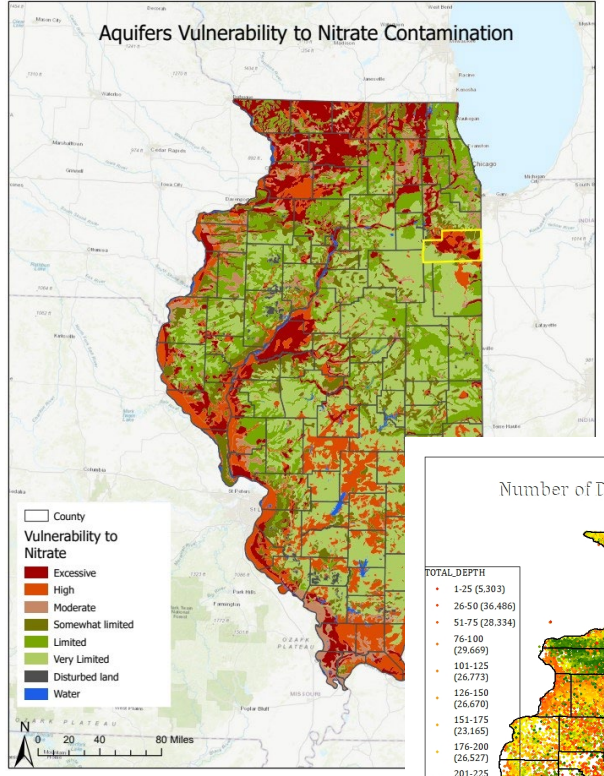


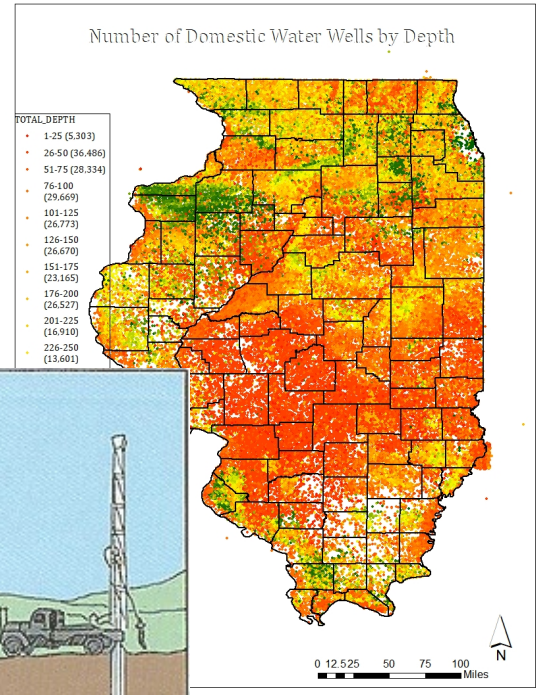
Figure 7.2. Candidate watersheds for nutrient monitoring plan development

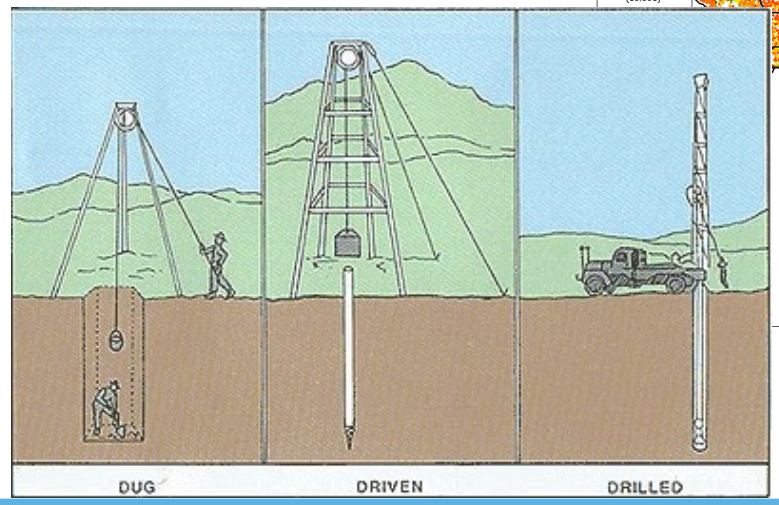
Where are the hot spots?

Variables Increasing Vulnerability to Contamination

- Near agriculture
- Groundwater close to the surface
- Soil type
- Shallow wells (< 50ft)
- Well type







PILOT STUDY: AGRICULTURAL CHEMICALS IN RURAL, PRIVATE WELLS IN ILLINOIS

- IL State Water Survey (ISWS)
- 240 wells over 5 counties (of 102)
- 40% of Dug or bored wells had nitrate over the MCL

Table 16 Occurrence of nitrate in the five study areas.

County	Number of occurrences	Number of samples	Percent occurrence
Effingham	19	48	40
Kankakee	14	48	29
Mason	7	48	15
Livingston	2	48	4
Piatt	0	48	0
Total	42	240	18

Table 18 Agricultural chemicals detected.

Compound	NPS method	Number of occurrences	MRL[a] (µg/L)	Concentration[b] low	Concentration[b] high	No. of high occurrences[c]	HAL or MCL[d] (µg/L)
nitrate	9	42	30.0[e]	11,000	58,000	42	10,000*

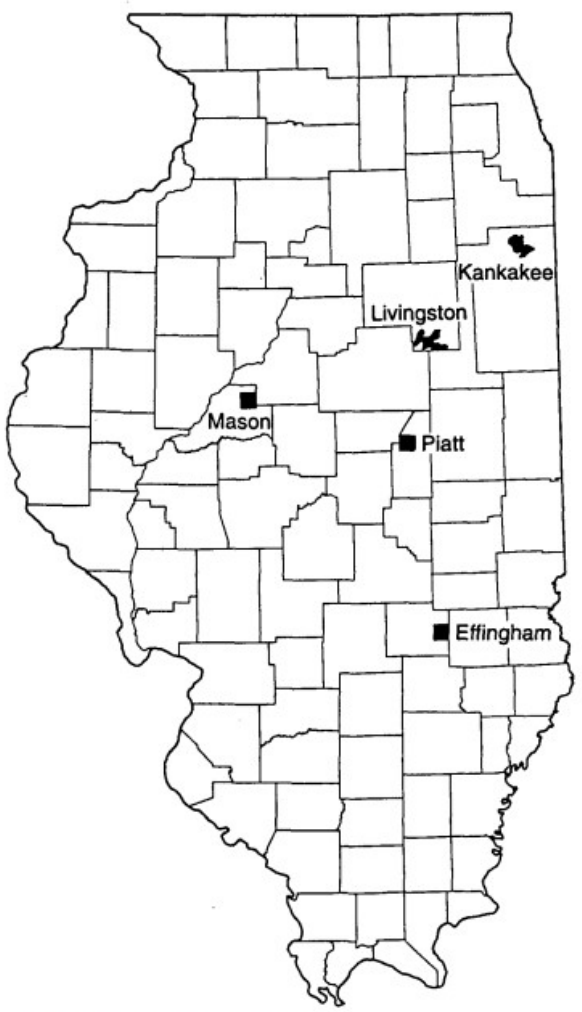
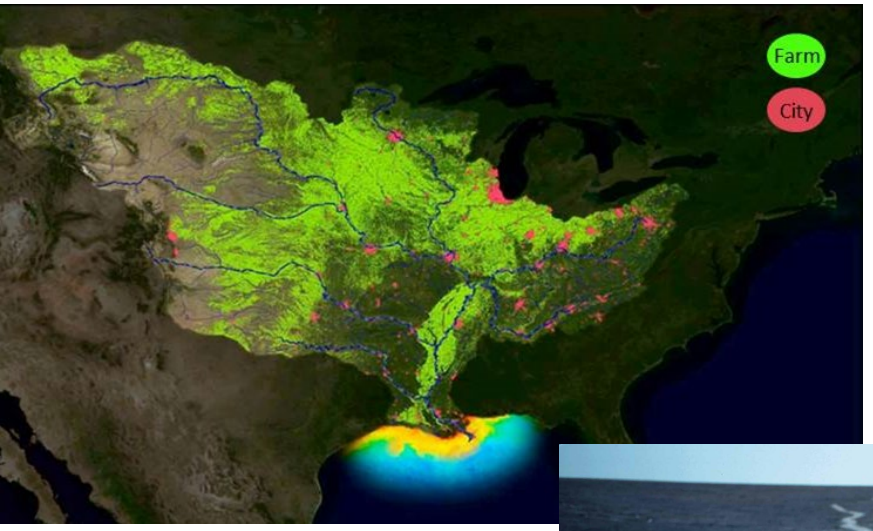


Figure 1 Location of pilot study areas.

Nutrient Pollution ⟷ Drinking Water



The Nature Conservancy

Adrienne Marino

Collaborating to meet nutrient loss reduction goals in Illinois

The Nature Conservancy

Adrienne Marino
Water Quality Program Manager
adrienne.marino@tnc.org

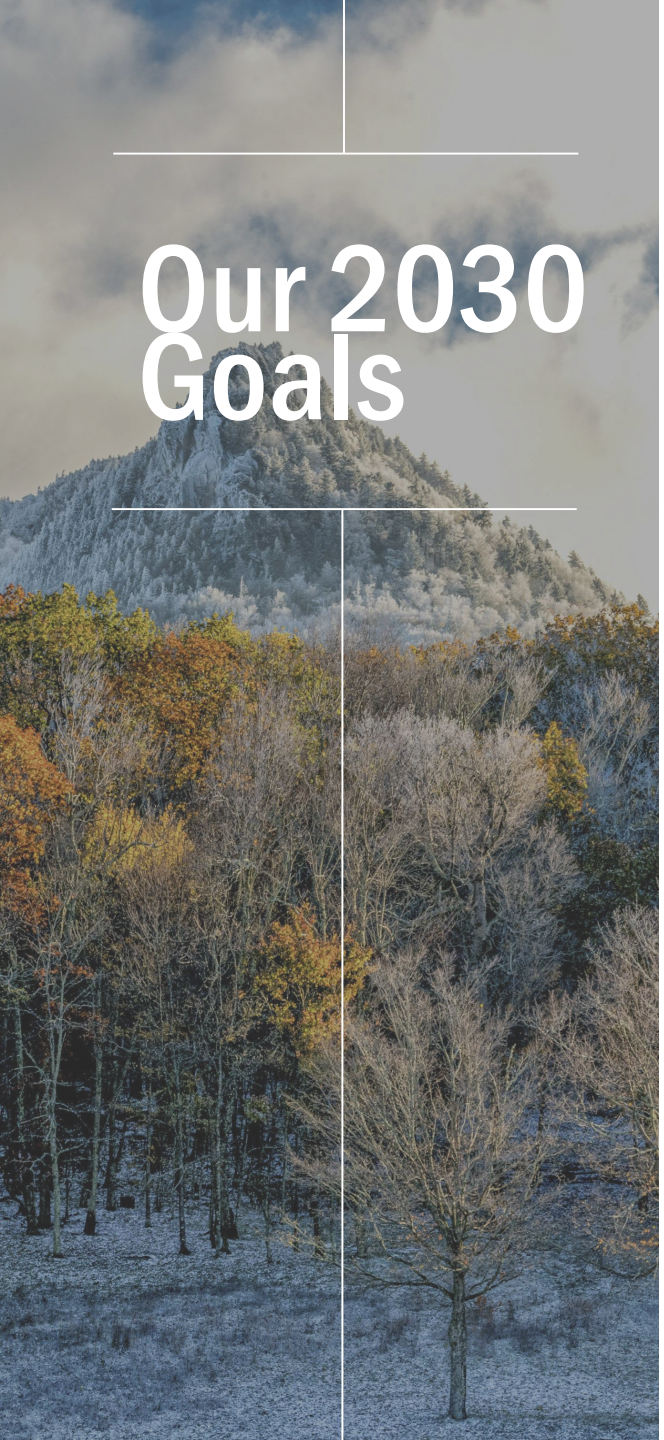
Franklin Research and Demonstration Farm – Lexington, IL

Tim Lindenbaum

SWCS/NRCS, photo by Lynn Betts

Key for increasing pace and scale of conservation implementation

1. **Communication** - Learnings and messages related to conservation practices – infield, edge of field, and downstream –and their multiple benefits
2. **Research** – Identifying and filling knowledge gaps
3. **Metrics and dashboards** – Improving tracking of progress at multiple scales
4. **Administration** - Identifying changes to agency programming/policies to better align with meeting NLRS goals



Our 2030 Goals

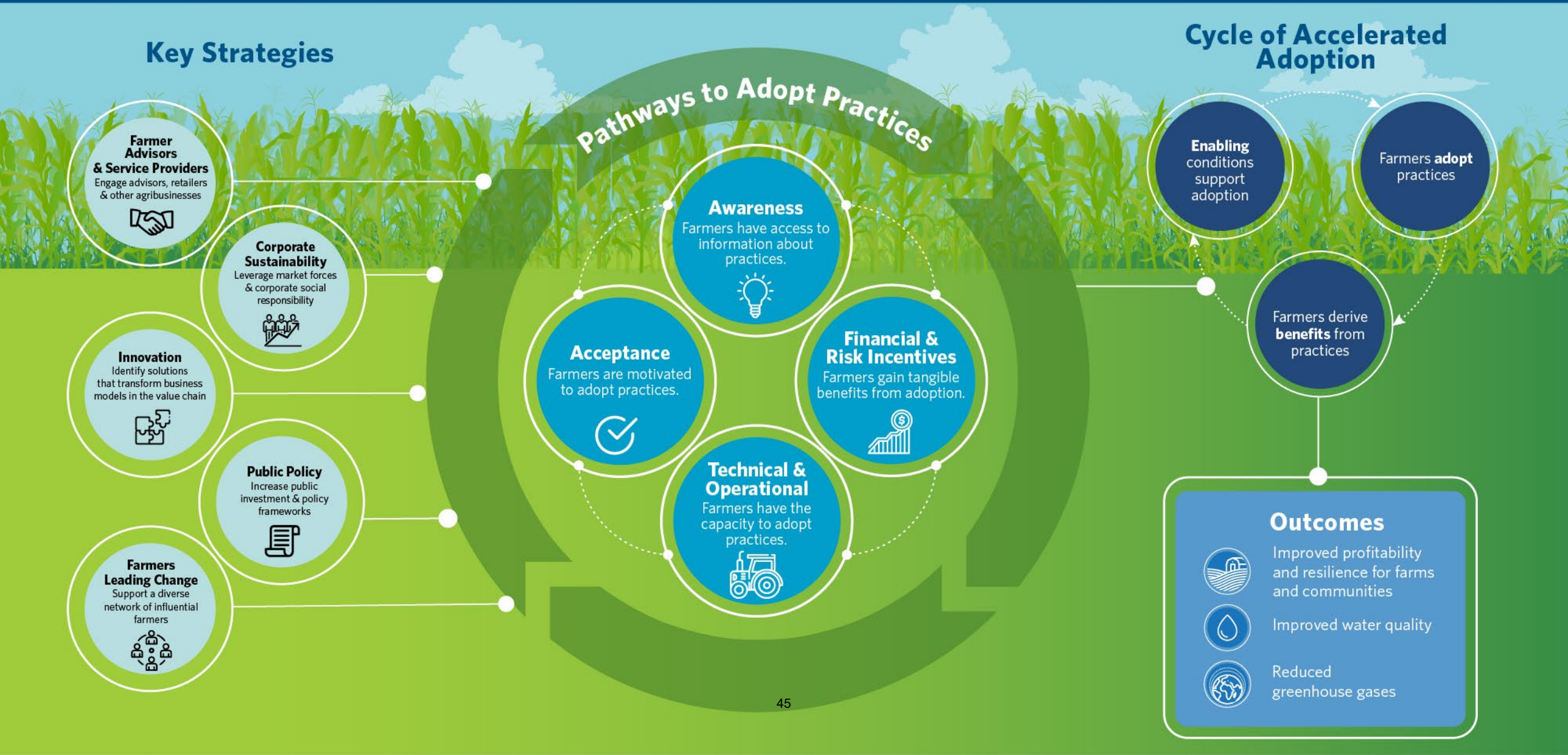
CLIMATE	**CLIMATE**	3Gt CO2e/yr	increased sequestration or reduced emissions of greenhouse gas
		100M people	who are most vulnerable to an increased risk of flooding, fire or drought benefitting from nature to adapt to climate change
ECOSYSTEMS	**OCEANS**	4B hectares	healthy ocean regions that are important for biodiversity and carbon
	FRESHWATER River Systems	1M km	healthy river systems that are important for biodiversity and carbon
	FRESHWATER Lakes & Wetlands	30M hectares	healthy lakes and wetlands that are important for biodiversity and carbon
	LANDS	650M hectares	healthy lands that are important for biodiversity and carbon
	PEOPLE	45M people	who are benefitting from healthy ocean regions, freshwater systems and lands that are important for biodiversity and carbon

U.S. Regenerative Row Crops

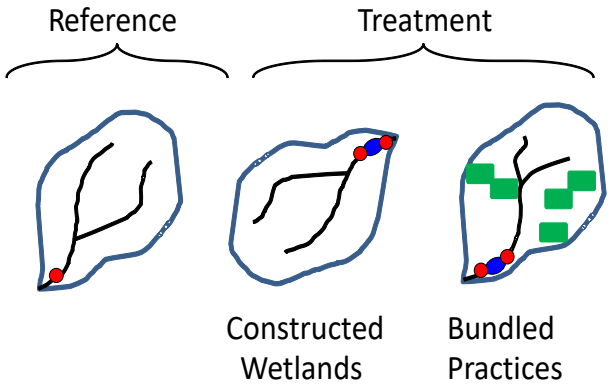
Our Theory of Change to achieve resilient, climate-smart farms that benefit people and nature

Collaboration and alignment across policy, business and science sectors can help guide and incentivize large-scale adoption of regenerative practices by U.S. farmers, leading to significant benefits for farmers, communities and nature.

The Nature Conservancy



Science and Application
Working across multiple scales



<u>FIELD AND FARM</u>

Constructed Wetlands
Cover Crops
Spring Nitrogen

Farm also includes floodplain wetlands, prairie restoration, and woodland management

Education and Outreach Value

<u>SMALL WATERSHED</u>

Mackinaw Paired Watershed Project

20+ years of data in 10,000-acre treatment and reference watersheds

What level of conservation practice implementation is needed to impact water quality at the small watershed scale?

<u>LANDSCAPE</u>

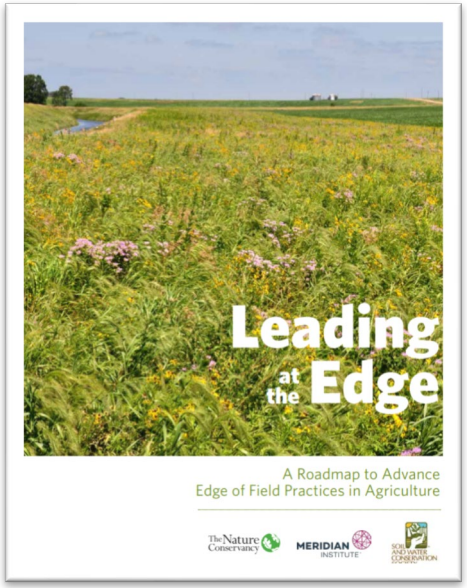
Ag Conservation Planning Framework
Mackinaw Watershed
IL ACPF Cohort (via ISAP)

Floodplain Protection and Restoration
Emiquon Preserve
Spunky Bottoms Preserve
Dogtooth Bend
Floodplain Prioritization Tool

Illinois' Soil Health & Nutrient Strategy

Farmer Advisors and Service Providers	Corporate Sustainability	Inform & Engage	Edge of Field	Science & Evaluation
• Advanced Soil Health Training • Retailer Programs	• Midwest Row Crop Collaborative	• Watershed Initiatives • IL Sustainable Ag Partnership • STAR	• Advanced Conservation Drainage Training	• Franklin Farm • Paired Watershed Study

Example Resources



If you provide cost share or technical assistance, describe it, identify gaps and what is working or not working.

Working

- Providing local offices with flexibility in how funds are distributed.
- Simple processes for growers to participate and receive reimbursement
- Ability to stack benefits/payments

Not Working

- No catalyst driving adoption.
- Even with 100% cost share, limited uptake of EoF and conservation drainage practices
- Cost-share program requirements can be burdensome and take too long.
- Mixed and/or inconsistent messages about practices.

SWCS/NRCS, photo by Lynn Betts

Looking on smaller scales, how can you catalyze practice adoption?

1. At all levels – communicate greater urgency to act/solve problem
2. Increase capacity (technical assistance, outreach) at local levels (SWCDs, TSPs)
3. Develop and advocate for more flexible cost-share program requirements and processes
4. Increase incentives for practices with downstream benefits (EoF, tile treatment)
5. Build capacity to use ACPF in planning and outreach, with implementation resources. (Training on GIS and outreach components)
6. Develop easy to use metrics and dashboards that illustrate progress at local scale, and that can be aggregated for use at larger scales.
7. Work at landscape scale - Expand efforts to protect and restore riverine floodplains and establish permanent conservation easements

SWCS/NRCS, photo by Lynn Betts

How can you engage the middle- to late-adopters to implement practices?

1. Align learnings – coordinate messages
2. Identify knowledge gaps and support efforts to address them (including social sciences, economics)
3. Engage private sector in projects and innovative financing mechanisms
4. Highlight multiple benefits possible through conservation on ag lands
    a. Elevate production benefits of in field practices
    b. Demonstrate potential for improved ROI from edge of field implementation on lower producing acres.
    c. Promote stacking of conservation benefits (payments for ecosystem services)

Resources

Edge of Field Roadmap (2021)

- Executive Summary
- Full Report

IL Climate Assessment (2021)

- Climate Change in Illinois: Agriculture (fact sheet)
- Full Report

Floodplain Prioritization Tool and Factsheet (2019)

IL Sustainable Ag Partnership (ISAP)

Tim Lindenbaum

Illinois Soybean Association

Megan Miller

Illinois Soybean Association
AWQPF Partnership Forum

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Hello from the ISA Agronomy Team!

Jennifer Jones jonesj@ilsoy.org
Abigail Peterson abigail@ilsoy.org
Megan Miller millerm@ilsoy.org

- ✓ Support all in-field agronomic needs.
- ✓ Advance soybean management systems to protect and improve soil productivity and water quality.
- ✓ Continue to sustainably improve the quality and yield of high performing soybean systems.
- ✓ Support soybean farmers' production by evaluating economics and return on investment.
- ✓ Promote, research, and drive soybean production education.

PEPSICO

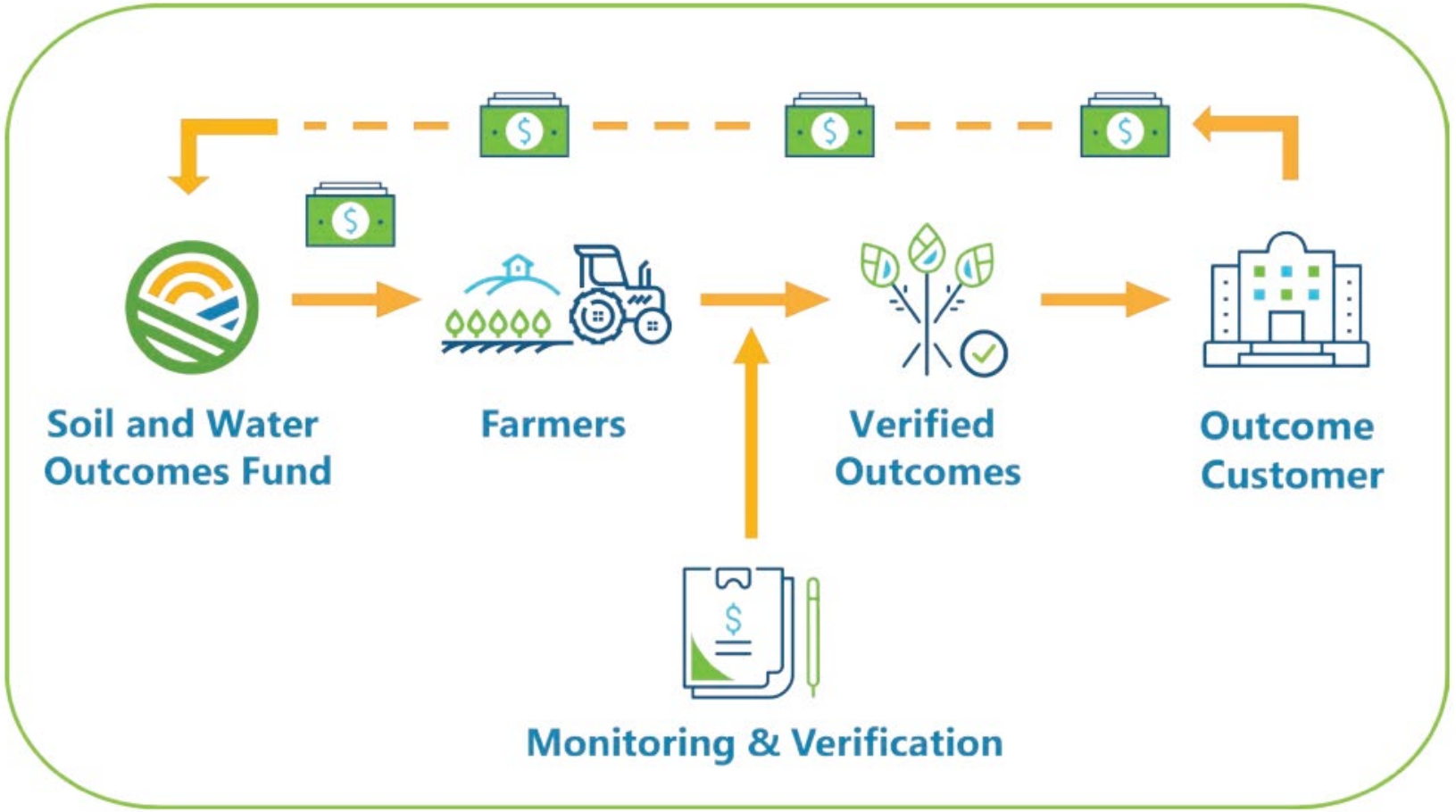
Ingredion

Nutrien Ag Solutions™

USDA

Soil and Water Outcomes Fund

How the Fund Works



Soil and Water Outcomes Fund

2021 Region

2021 Enrollment

Enrollment: 117 fields enrolled totaling 14,684 acres
CO2: 7,937 metric tons, equivalent to removing **1,726** cars from the road for one year
Nitrogen: 214,605 pounds prevented from entering waterways
Phosphorus: 8,342 pounds prevented from entering waterways

Cover Crops	Reduced Till	No - Till
11,160 acres	4,405 acres	2,790 acres

SWOF region and acreage will be expanding in 2022
----Enrollment announcement coming soon

Soil and Water Outcomes Fund

Kevin Schabacker

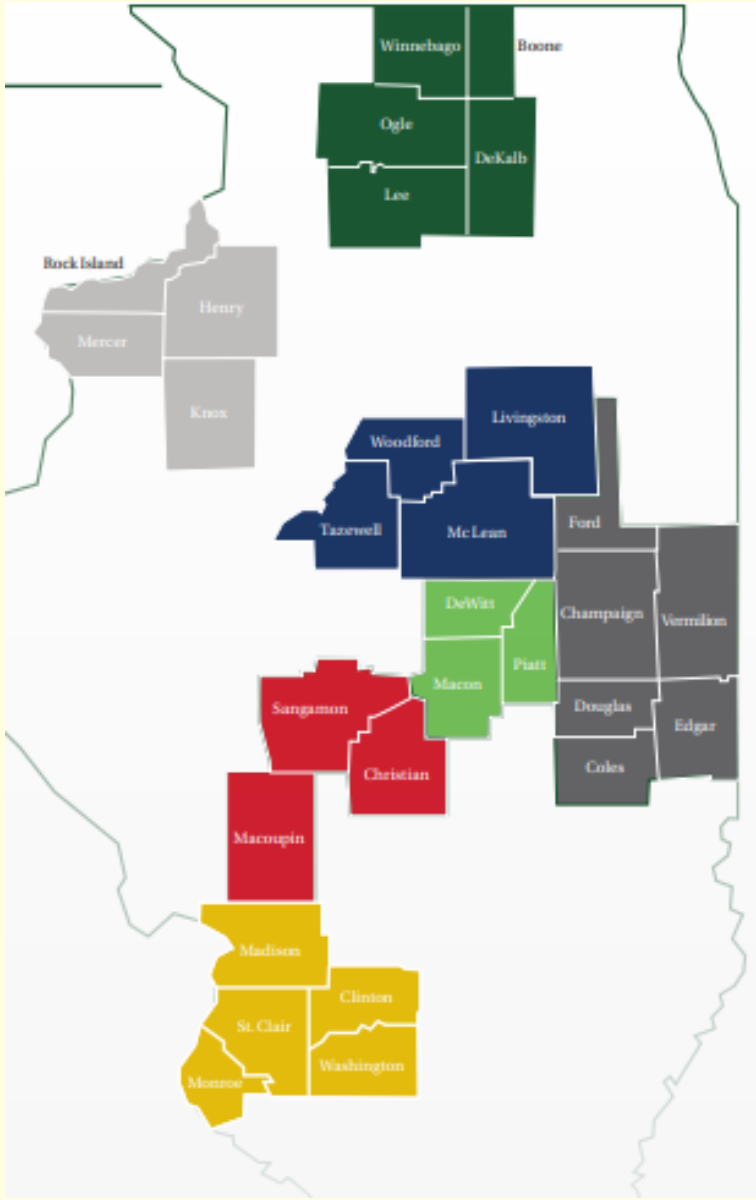
Conservation Agronomist

Kevin Schabacker is a conservation agronomist for AgOutcomes, a subsidiary of the Iowa Soybean Association. In this role, Kevin works with farmers and affiliate recruiters on enrollment and helping enrollees succeed throughout the season. He is based in Illinois.

Kevin grew up on a no-till grain farm in Ogle county, IL. His experience in agriculture ranges from helping on the family farm to agronomy sales, crop protection research, and most recently plant breeding. Kevin attended Kishwaukee Community College and earned a bachelors degree in Crop, Soil, and Environmental Management from Southern Illinois University.

Precision Conservation Management

- 3 new PCM regions and specialists
- Expansion of protocol to double-crop acres in Southern Illinois
- Developing online data tools for use in the research community



3,550 Acres of Cover Crop Cost Share and Technical Support in 2021

Precision Conservation Management

ESTB 1964 ILLINOIS SOYBEAN ASSOCIATION

The Nature Conservancy

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Grower & Agronomist
Outreach & Education

CarbonSense

Website & Data Guidebook

- ✓ Advanced Soil Health Training
- ✓ Best Management Practice Educational Materials

Contact Information

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Manager

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309-846-1214

Website:

www.ilsoy.org
www.ilsoyadvisor.com

Partner Sharing Session

Each organization may share a statement (7-10 minutes each).

Opportunity to share:

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3. *Illinois Certified Crop Advisor Program*
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7. *Illinois Society of Professional Farm Managers and Rural Appraisers*
8. *Metropolitan Water Reclamation District of Greater Chicago*

Metropolitan Water Reclamation District of Greater Chicago

Guanglong Tian

Climate-Smart Agriculture Update

Michael Woods, IDOA

ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

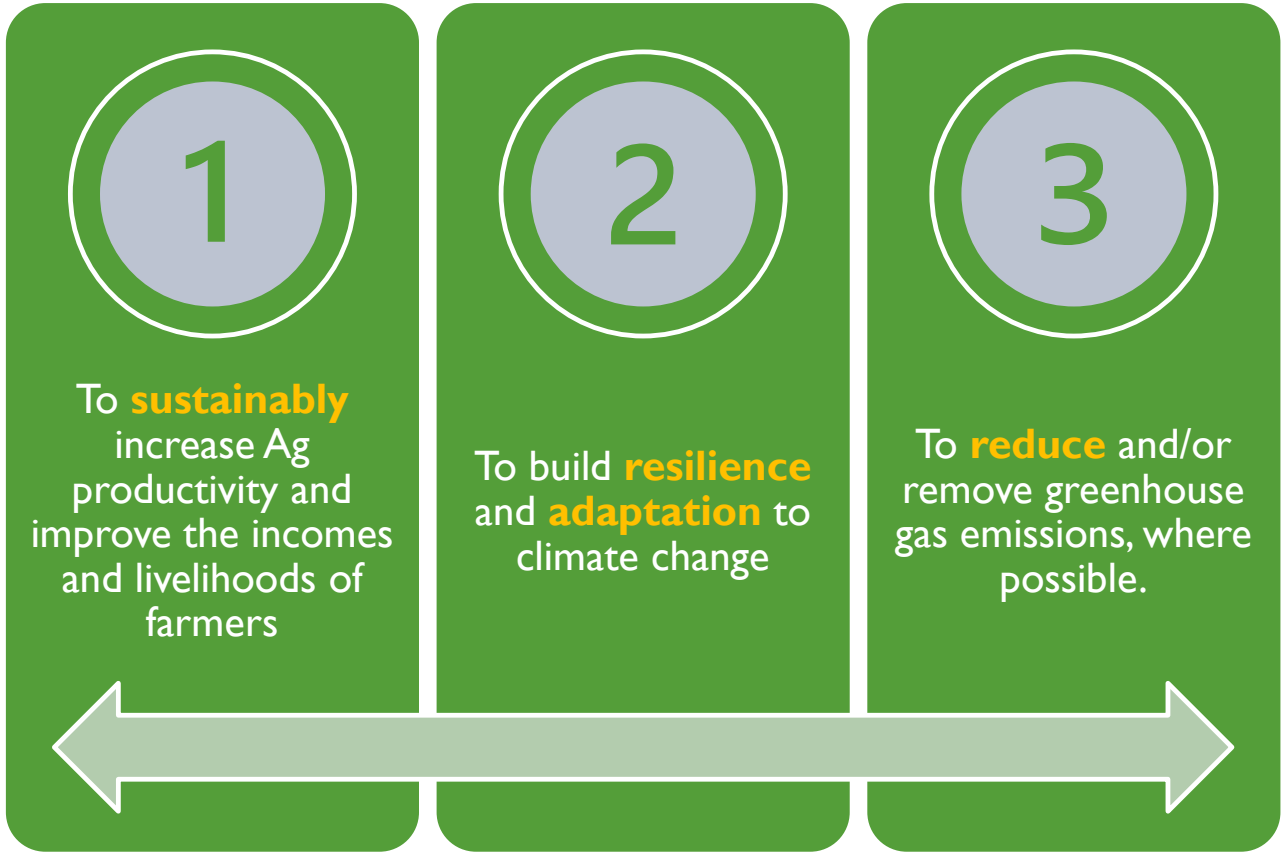
Illinois Department of Agriculture

CLIMATE-SMART AGRICULTURE

New tools for the Agricultural Toolbox

Presented by:
Michael D. Woods, Division Manager
Division of Natural Resources, Illinois Department of Agriculture

CLIMATE-SMART AGRICULTURE



Illinois Department of Agriculture

~ Food and Agricultural Organization of the United Nations

UPDATE ON IDOA CLIMATE-SMART INITIATIVES

Illinois Climate-Smart Agricultural Partnership

Goals

Increase the amount of Conservation Cropping Practices installed in Illinois while reducing the amount of Sediment, Nitrogen, Phosphorus loading in Mississippi River Basin and also raising awareness of Carbon capturing or limiting release carbon by introducing Illinois Climate-Smart Agricultural Partnership.

Objectives

1. Expand the use of conservation cropping systems in Illinois by leveraging “Climate-Smart Agricultural Practices” across the state’s diverse watersheds.
2. Formalize the creation of the Illinois Climate-Smart Agricultural Partnership.
3. Establish educational and training opportunities to advance evidence-based climate-smart agricultural practices throughout Illinois.
4. Unite outreach and marketing initiatives to farmers and industry professionals that strengthen implementation of climate-smart agricultural practices.

US Climate Alliance Study

Overcoming barriers to implementing
climate smart agricultural practices and policy.

Goals

To close that gap by identifying local barriers to adoption, developing a framework to expand on-farm implementation, and informing policy to support state-wide climate-smart agricultural practices.

Objectives

The project aims to produce three primary outcomes:

1. a ranked list of barriers from all SWCDs;
2. a framework tool for assessing local opportunities for expanding practice adoption and setting attainable goals; and
3. education materials for state-level staff and policy makers to advance climate-smart ag practices in Illinois.

UPDATE ON IDOA CLIMATE-SMART INITIATIVES

USDA Partnership for Climate-Smart Commodities

Illinois Agricultural Climate Trust

Goals

Seed funding to support the establishment of the Illinois Agricultural Climate Trust (IACT) and a comprehensive, climate solutions policy framework.

Illinois Finance Authority and the IDOA are partnering with Illinois state agencies, colleges and universities, Illinois Extension, and over two dozen stakeholder agricultural and conservation organizations in proposing a bold, ready-to-implement, statewide pilot project that accelerates delivery of essential climate-related investments to the people of Illinois through a sound and sustainable financial tool—Illinois Agricultural Climate Trust (IACT).

The newly established trust will enable Illinois to secure and invest vital fiscal resources (such as, including but not limited to loans, guarantees, grants, interest rate reductions, joint ventures) to further climate-smart agricultural practices across the states' diverse agriculture and food sectors during the grant period and beyond as IFA and IDOA envision grant funding from the USDA Climate Smart Commodities program to operate as seed funding while policy changes are pursued at the state level to increase the state's investment in these practices over time.

UPDATE ON IDOA CLIMATE-SMART INITIATIVES

USDA Partnership for Climate-Smart Commodities

Illinois Agricultural Climate Trust

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UPDATE ON IDOA CLIMATE-SMART INITIATIVES

USDA Partnership for Climate-Smart Commodities

Illinois Agricultural Climate Trust

Project Partners

State Steering Committee Members

- Illinois Department of Natural Resources
- Illinois Environmental Protection Agency
- Illinois Community College Board
- University of Illinois Extension

Priority Initiative Taskforce Members

- American Farmland Trust
- Association of Illinois Soil and Water
- Conservation Districts
- Chicago Botanical Garden
- Ducks Unlimited Great Lakes Region
- Farm Journal
- Illinois Agri-Food Alliance
- Illinois Bankers Association
- Illinois Beaver Alliance
- Illinois Beef Association
- Illinois Certified Crop Advisors
- Illinois Corn Growers Association
- Illinois Environmental Council
- Illinois Nutrient Research & Education Council
- Illinois Pork Producers
- Illinois Stewardship Alliance
- Illinois Soybean Association
- Illinois Sustainable Ag Partnership
- Izaak Walton League of America
- Metropolitan Water Reclamation District of
- Greater Chicago
- National Assoc. of State Dept. of Agriculture
- National Hook-Up of Black Women, Inc.
- Pheasants Forever & Quell Forever
- Polar Production/Wild Foods
- Saving Tomorrows Agricultural Resources
- The Conservation Fund
- The Nature Conservancy
- The Wetlands Initiative
- Waterborne Environmental

UPDATE ON IDOA CLIMATE-SMART INITIATIVES

USDA Partnership for Climate-Smart Commodities

Cultivate40

Goals

IFA and IDOA proposes the establishment of the Illinois Cultivate40 Accelerator as part of the broader Illinois Agricultural Climate Trust (IACT), designed to facilitate direct assistance to socially disadvantaged and underserved producers who need technical assistance support in applying for economic stimulation grant programs and assistance with business planning, marketing strategies, and implementation of climate smart practices on the uncultivated or transitional land of the Illinois 'back forty.'

1. IFA and IDOA will team up with industry partners through Cultivate 40 to form a social impact accelerator.
2. Will provide advisory services, fundraising assistance, and marketing support for select startups working to change lives by developing social impact agricultural and food production in their communities across Illinois.

UPDATE ON IDOA CLIMATE-SMART INITIATIVES

USDA Partnership for Climate-Smart Commodities

Illinois Agricultural Climate Trust

Project Partners

State Steering Committee Members

- Illinois Department of Natural Resources
- Illinois Environmental Protection Agency
- Illinois Community College Board
- University of Illinois Extension

Priority Initiative Taskforce Members

- American Farmland Trust
- AISWCD
- Chicago Botanical Garden
- Chicago High School of Ag Sciences
- Experimental Station
- Growing Home
- Illinois Agri-Food Alliance
- Illinois Bankers Association
- Illinois Environmental Council
- Illinois Stewardship Alliance
- Illinois Sustainable Ag Partnership
- Izaak Walton League of America
- MANRRS-Southern Illinois University
- Metropolitan Water Reclamation District
- National Hook-Up of Black Women, Inc.
- Pheasants Forever & Quell Forever
- The Conservation Fund
- The Nature Conservancy
- The Wetlands Initiative
- Urban Growers Collective

UPDATE ON IDOA CLIMATE-SMART INITIATIVES

USDA Partnership for Climate-Smart Commodities

Cultivate40

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Illinois Department of Agriculture

CLIMATE-SMART AGRICULTURE

New tools for the Agricultural Toolbox

Agriculture BMP Data Sources for 2023 Biennial Report

Trevor Sample, Illinois EPA

ILLINOIS NUTRIENT LOSS REDUCTION STRATEGY

Agriculture BMP Data Sources

- Steering Committee sent a survey link to AWQPF members on April 25 to solicit feedback on agriculture data sources to be used in the 2023 Biennial Report

- Comments were received from seven organizations

Saturated Buffers

- 2023 will be the first year to report implementation of this practice
- Responses for data sources included:
  - Ag Drainage Management Coalition
  - Illinois Association of Drainage Districts
  - Tile Retailers
  - ISAP
- Absent responses from these organizations, State and Federal cost-share program data may be only option.

Terraces

- 2023 will be the first year to report implementation this practice
- Responses for data sources included:
  - LiDAR or modeling
  - IDOA Transect Survey
  - Aerial imagery

- Absent responses from these organizations, State and Federal cost-share program data may be only option.

Wetlands

- Responses for data sources included:
  - Aerial imagery
  - ISAP

Bioreactors

- Responses for sources included:
  - Ag Drainage Management Coalition
  - Illinois Association of Drainage Districts
  - Tile Retailers
  - ISAP
  - IDOA Transect Survey
  - Aerial Imagery

- Should future reporting only include bioreactors less than 10 years old?
  - Several responded yes, we should
  - 10 years is too generous, fresh woodchip effect fades 3-4 years
  - How do we determine if it hasn't been recharged?

Buffers/Filter Strips

- Should we use the CropGrower statewide GIS analysis as the data source for buffers/filter strips?
- Responses:
  - Most said Yes
  - Comments
    - It would be better to work with U of I researchers to gather these data and to include other practices such as tillage, cover crops and terraces.
    - Unsure of using imagery to identify practice functionality.

Cover Crops

- We have multiple sources for reporting covers crops.
  - State and Federal cost-share programs
  - NLRS NASS Survey
  - FSA farmer reported data
- All of these sources are included in the Biennial Report Ag chapter
- The question was **which single source** should be used for the Adaptive Management chapter (for scenario purposes)
- Responses were mixed with most being NASS, FSA, or both
- Previous reports used NASS data

Additional Comments

- Interest in adopting Iowa's dashboard reporting system
- Spatial imagery data would provide the most accurate information. However, farmer privacy should be protected and may involve data agreements.
- Reporting should be aggregated at the statewide scale.