



# Illinois Farmer Efforts to Protect Water Resources

Lauren Lurkins  
Director of Environmental Policy  
Illinois Farm Bureau





## ILLINOIS FARM BUREAU

- Since 1916, Illinois Farm Bureau has provided education and information to help farmers, while supporting legislation and lobbying about agricultural issues.
- Founded by farmers as the Illinois Agricultural Association, one of the first activities of the new organization was to bring soil and crop specialists to each county to supply farmers with the latest agricultural research information and recommendations.
- Today, IFB has approximately **80,000** voting members. The voting membership represents three out of every four Illinois farmers.
- Farmers join through their county Farm Bureau and engage in a grassroots policy development process, programs and initiatives.



# SURFACE WATER QUALITY

- Gulf Hypoxia Task Force
- Forecasted 2019 Hypoxic Zone - Size of Massachusetts
- Nutrient Loss Reduction Strategy



**ILLINOIS**  
NUTRIENT LOSS  
REDUCTION STRATEGY

Improving our water resources with  
collaboration and innovation





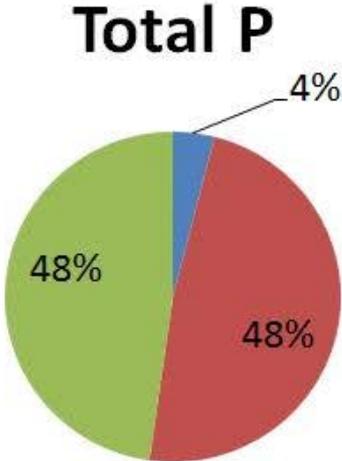
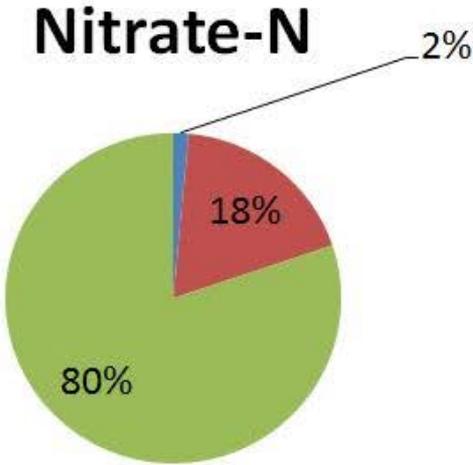
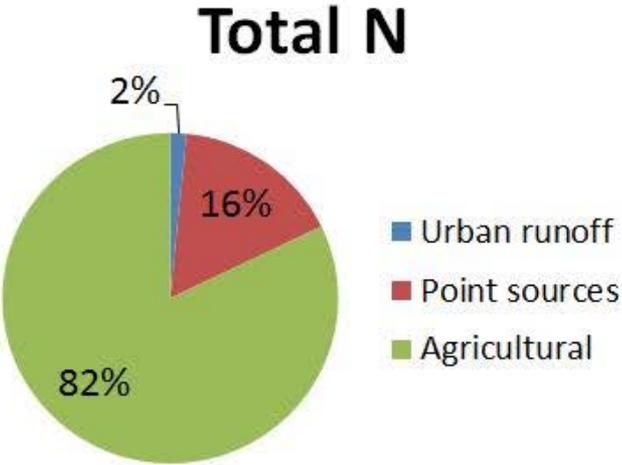
# SCIENCE ASSESSMENT

- February 2013 - Illinois EPA partnered with University of Illinois to develop the Science Assessment:
  - Current conditions in Illinois of nutrient sources and export by rivers in the state from point and non-point sources
  - Methods that could be used to reduce these losses and estimates of their effectiveness throughout Illinois
  - Estimates of the costs of statewide and watershed level application of these methods to reduce nutrient losses to meet TMDL and Gulf of Mexico goals



# SCIENCE ASSESSMENT

Illinois contributes 20% of nitrate (410 M lbs) and 11% of phosphorus (37.5 M lbs) that makes it to the Gulf





# STRATEGY TARGETS AND COSTS

- Baseline - Average annual loading of nitrate-N and P from the 1980-1996 levels
- Targets - (5 year running average)
  - N: 15% by 2025, 45% ultimate
  - P: 25% by 2025, 45% ultimate
- Estimated costs - over \$800 million annually from point source and nonpoint source, with no new funding sources



Table 3.11. Example statewide results for nitrate-nitrogen reductions with shading to represent in-field, edge-of-field, land use, and point source practices or scenarios.

Practice/scenario	Nitrate-N reduction per acre (percent)	Nitrate-N reduced (million lb)	Nitrate-N reduction from baseline (percent)	Cost (\$/lb removed)
Reducing N rate from background to MRTN on 10 percent of acres	10	2.3	0.6	-4.25
Nitrification inhibitor with all fall-applied fertilizer on tile-drained corn acres	10	4.3	1	2.33
Split application of 50 percent fall and 50 percent spring on tile-drained corn acres	7.5-10	13	3.1	6.22
Spring-only application on tile-drained corn acres	15-20	26	6.4	3.17
Split application of 40 percent fall, 10 percent pre-plant, and 50 percent side dress	15-20	26	6.4	
Cover crops on all corn/soybean tile-drained acres	30	84	20.5	3.21
Cover crops on all corn/soybean non-tiled acres	30	33	7.9	11.02
Bioreactors on 50 percent of tile-drained land	40	56	13.6	1.38
Wetlands on 25 percent of tile-drained land	40	28	6.8	5.06
Buffers on all applicable crop land (reduction only for water that interacts with active area)	90	36	8.7	1.63
Perennial/energy crops equal to pasture/hay acreage from 1987	90	10	2.6	9.34
Perennial/energy crops on 10 percent of tile-drained land	90	25	6.1	3.18
Point source reduction to 10 mg/L		14	3.4	3.3





Table 3.14. Example statewide results for total phosphorus reductions by practice/scenario with shading to represent in-field, edge-of-field, land use changes, and point source practices or scenarios.

Practice/scenario	Total P reduction per acre (percent)	Total P reduced (million lb)	Total P reduction from baseline (percent)	Cost (\$/lb removed)
1.8 million acres of conventional till eroding >T converted to reduced, mulch, or no-till	50	1.8	5	-16.6
P rate reduction on fields with soil test P above the recommended maintenance level	7	1.9	5	-48.75
Cover crops on all corn/soybean tile-drained acres	30	4.8	12.8	130.4
Cover crops on 1.6 million acres eroding >T currently in reduced, mulch, or no-till	50	1.9	5	24.5
Wetlands on 25 percent of tile-drained land	0	0	0	
Buffers on all applicable crop land	25-50	4.8	12.9	11.97
Perennial/energy crops equal to pasture/hay acreage in 1987	90	0.9	2.5	102.3
Perennial/energy crops on 1.6 million acres >T currently in reduced, mulch, or no-till	90	3.5	9	40.4
Perennial/energy crops on 10 percent of tile-drained land	50	0.3	0.8	250.07
Point source reduction to 1 mg/L (majors only)		8.3	22.1	13.71





## ONGOING WORKING GROUPS

1. Policy Work Group
  2. Nutrient Monitoring Council
  3. Nutrient Science Advisory Committee
  4. Agricultural Water Quality Partnership Forum
  5. Urban Stormwater Working Group
  6. Point Source Working Group
- Summary of all these, meeting agendas, meeting minutes, etc. available on IEPA's website: <http://www.epa.illinois.gov/topics/water-quality/watershed-management/excess-nutrients/nutrient-loss-reduction-strategy/index>



# TRACKING MEASURES

## Resources

- ▶ Staff
- ▶ Funding & Grants

## Outreach

- ▶ Partner organization's events & media
- ▶ Farmer knowledge

## Land & Facilities

- ▶ Land use changes
- ▶ Facility & permit updates

## Water

- ▶ Calculated load reduction
- ▶ Measured loads at existing monitoring stations



IFB HAS PRIORITIZED LEADING ON  
ENVIRONMENTAL ISSUES - WITH A SPECIAL  
FOCUS ON THE NLRS  
2015 TO CURRENT - \$1.5 MILLION

CURRENT IFB NLRS PRIORITIES

- Education and Outreach
- Supporting Research
- Supporting Implementation
- Demonstrating Progress



## EDUCATION AND OUTREACH

- From 2015 to present:
  - Almost 48,000 people reached in 306 events (field days, workshops, webinars, conferences, presentations)
  - Approximately 500 FarmWeek articles to 74,000 weekly subscribers
  - Approximately 45 RFD Radio interviews, 80 rural markets in Illinois
  - Approximately 5 million people reached on social media
  - Approximately 60,000 visits to [www.ilfarmersconserve.com](http://www.ilfarmersconserve.com)



## SUPPORTING RESEARCH

Scientific Researchers from:

- University of Illinois at Urbana-Champaign
- University of Illinois Extension
- Illinois State University
- Southern Illinois University Carbondale
- Prairie Research Institute

- ❖ Advisory Committees
- ❖ Support letters
- ❖ Farmer focus groups
- ❖ Hosting on-farm research sites





# Supporting Implementation





## DEMONSTRATING PROGRESS

**Reporting Element 2 – Outreach and communication activities, JULY - DEC 2018**  
Please describe the following items related to resources available and/or needed in Organization/Agency-Supported Outreach Activities during the reporting period for the Nutrient Loss Reduction Strategy and/or practices detailed in the science assessment.

Name:	Attendance:	Topics Covered:	Partnerships:	Response/ Feedback:
<b>Field Days: Includes learning activities sponsored at demonstration farms, water treatment plants and other locations.</b>				
49:00 Field Day Christian County Farm Bureau / FS - 7/12/2018	50	Nutrient management trials	Illinois Farm Bureau, GROWMARK	Showcase of local farmer/retailer partnership
SRU Belleville Research Station Field Day - 7/12/2018	222	NURS, farmer implementation	Southern Illinois University	Great relationship building opportunity between the Farm Bureau and SRU
Stark County Farm Bureau and Blackhawk East Community College Nutrient Stewardship Local Field Day - 7/26/2018	45	Workshop, biocontrols	Stark County Farm Bureau, Blackhawk Community College, SWCD, USDA NRCS	Great learning opportunity for students - bring laboratory on campus
Livingston County Farm Bureau Field Day at John Wilkins Farm - 7/26/2018	60	Cover crop termination, strip till, soybean cyst nematode	American Farmland Trust, Vermilion Woodhullers Watershed Group, Soil Health Partnership	Great data from a local farmer on how management impacts cover crops
Clinton County Farm Bureau Nutrient Stewardship Grant Project Field Day - 7/28/2018	100	Cover crops, manure	Clinton County Farm Bureau, Gateway FS, Terry Wyciskala, SWCD, U of I Extension, Heartland Conservancy, Lower Kaskaskia Stakeholders, 8 Milk Producers, 8 Pork Producers, 8 Beef Asian, Marchhoff Pork, Kaskaskia Conserv. College	Continued success for multiple years looking at integrating livestock and cover crops, soil health, and manure management
Knox County Farm Bureau Saturated Buffer Field Day - 8/30/2018	35	Saturated buffers, research, cost-share	Knox County Farm Bureau, Knox County SWCD, Springfield Plastics, University of Illinois ACES, USDA NRCS	Revelation of sampling data showing aggressive nitrate removal rates for the practice



Important for:

- Tracking progress
- Telling farmer stories to a variety of audiences and agencies
- Showing diversity of needs and practices across state

**2018 WATER QUALITY UPDATE**

IFB ILLINOIS FARM BUREAU Farm. Family. Food.™



# LIVESTOCK

- Focus on education of rules
  - New rules promulgated by IPCB in 2014
  - TSP training with IEPA
  - Roadshow and webinar with livestock groups
  - Resource guides for swine, dairy and beef producers
  - All sizes
  - Farm Gate - to help get information specifically to medium and small operations



# THANK YOU!

Lauren Lurkins

[llurkins@ifb.org](mailto:llurkins@ifb.org)

(309) 557-3153