



ILLINOIS NREC

MAXIMIZE EFFICIENCY. MINIMIZE LOSSES. MITIGATE ENVIRONMENTAL IMPACTS.

NREC REFRESHER

- CREATED IN 2012 THROUGH STATE STATUTE
 - PURSUE NUTRIENT RESEARCH & EDUCATIONAL PROGRAMS
 - ENSURE ADOPTION AND IMPLEMENTATION OF PRACTICES THAT:
 - OPTIMIZE NUTRIENT USE EFFICIENCY
 - ENSURE SOIL FERTILITY
 - ADDRESS ENVIRONMENTAL CONCERNS WITH REGARD TO FERTILIZER
- FUNDED BY \$.75/TON ASSESSMENT ON BULK FERTILIZER SOLD IN ILLINOIS
- COLLABORATION BETWEEN AG, ENVIRONMENTAL GROUPS, AND STATE AGENCIES

INVESTMENT IN RESEARCH

- SINCE 2012, NREC HAS INVESTED OVER \$10M INTO NUTRIENT RESEARCH
- PRIMARY RESEARCH GRANT RECIPIENTS

University of Illinois	Illinois State University	Southern Illinois University
IFCA	CBMP	SWCD Districts
The Wetlands Initiative	CCA's	Notre Dame

- IN 2017, NREC IS FUNDING 23 PROJECTS (17 RENEWALS AND 6 NEW) AT \$2.98M
- IN ADDITION, THEY HAVE IDENTIFIED \$100,000 SPECIFICALLY FOR OUTREACH AND EDUCATION ACTIVITIES

NREC RESEARCH PRIORITIES - 2017

EMPHASIS WAS PLACED ON THE
INCLUSION OF AN ECONOMIC
COST/BENEFIT ANALYSIS

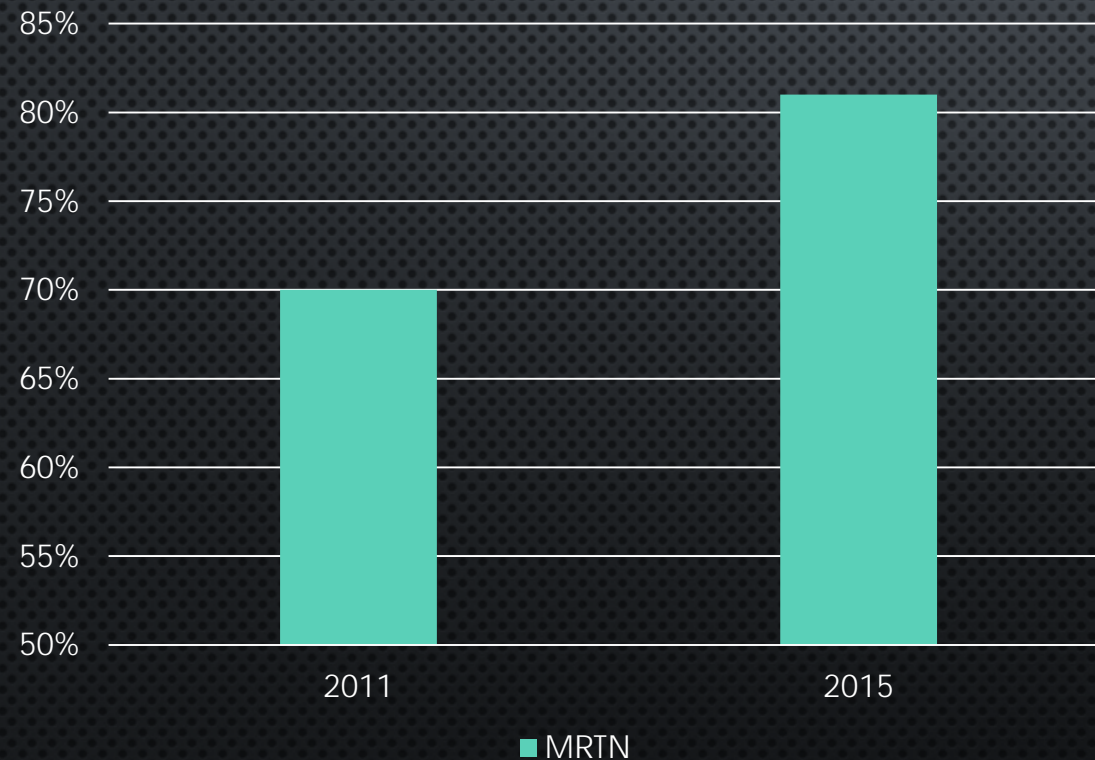
- **NITROGEN AND PHOSPHORUS MANAGEMENT**
 - IMPACT OF N MANAGEMENT SYSTEMS ON N USE
 - OPTIMUM N RATE
 - TIMING AND METHOD OF APPLICATION
 - EVALUATE EFFICACY OF FERTILIZER ADDITIVES
 - DETERMINE FACTORS IMPACTING RELEASE AND/OR TIE-UP OF ORGANIC AND FERTILIZER N
 - COVER CROPS
 - COMPARE N UTILIZATION FROM DAP/MAP IN COMPARISON TO TRIPLE SUPERPHOSPHATE
 - EVALUATE TILLAGE AND PLACEMENT AND TIMING OF P APPLICATIONS
- **TILE AND CONSERVATION SYSTEMS**
 - EVALUATE DRAINAGE WATER MANAGEMENT PRACTICES
 - BIOREACTORS, BUFFERS, AND SATURATED BUFFERS

FARMER AWARENESS AND PRACTICE ADOPTION – USDA/NASS SURVEY RESULTS

- FARMERS CONTINUE TO BE STEWARDS OF OUR NATURAL RESOURCES AND HAVE TAKEN SERIOUSLY THE CHALLENGES PRESENTED TO THEM IN THE NLRS
- THANKS TO WORK FROM MANY IN THE INDUSTRY, GREAT PROGRESS HAS BEEN SHOWN IN ADOPTION OF PRACTICES AND KNOWLEDGE OF CONSERVATION PRACTICES
- FARMERS HAVE SHOWN MARKED IMPROVEMENT IN:
 - MANAGING FERTILIZER APPLICATIONS TO ENSURE EFFICIENCIES
 - INCORPORATING COVER CROPS
 - EMBRACING REDUCED TILLAGE
- THERE IS ROOM FOR IMPROVEMENT IN THE ADOPTION OF EDGE-OF-FIELD PRACTICES

NASS SURVEY KEY TAKE-AWAYS

Use of MRTN



Nearly half of all farmers surveyed indicated that they are knowledgeable to very knowledgeable of MRTN



NASS SURVEY KEY TAKE-AWAYS



- More farmers are applying their N in the Spring than they were 5 years ago (200,000 more acres)
- Over 50% of farmers identify as being at least knowledge of the 4R's

Increase of nearly ½ million acres between 2011-2015



Less than
50%

Fall/winter



Pre-Plant

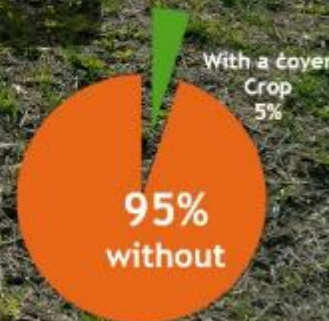


Side-dress

NASS SURVEY KEY TAKE-AWAYS

In Illinois, the number of tile-drained acres of cover crops has more than doubled since 2011.

But there is a lot of room for improvement.....



Reasons for using Cover Crops:

- Improved soil quality
- Erosion control
- Nitrogen preservation
- Control of weeds and other pests

HOW DO WE MOVE FROM AWARENESS TO IMPLEMENTATION?



- THE TIME IS NOW TO MOVE FROM BUILDING AWARENESS OF THE ISSUE TO GETTING PRACTICES ON THE GROUND
- ONE FULL CROP YEAR HAS COME AND GONE SINCE THE STRATEGY WAS RELEASED. THERE ARE ONLY 8 MORE CROPS BEFORE WE HIT OUR FIRST TARGET DATE

NREC'S ROLE IN PRACTICE IMPLEMENTATION



Peer-Reviewed
Science



Meet the Farmers
where they are and
utilize resources of
other stakeholder
groups



Best Management
Practices with Access
to Technical Expertise

NREC STRATEGIC PRIORITIES

NREC STRATEGIC PRIORITIES

TIMEFRAME	FUNCTIONAL AREA	PRIORITY ISSUE (GOAL)
IMMEDIATE	Operations	Systemize and set standards for operations, including through policies and procedures
SHORT TERM AND ONGOING	Research Steering	Proactively seek viable research with potential to have a significant impact, both from an economic and environmental standpoint; manage the reporting and evaluation of research projects
	Outreach	Effectively communicate NREC purpose, research findings and impact
LONG TERM AND ONGOING	Outreach	Track the adoption and implementation of practices, including through potential partnerships

RESEARCH STEERING

Priority Issue

Proactively seek viable research with potential to have a significant impact, both from an economic and an environmental standpoint; manage the reporting and evaluation of projects

Objective

Gather data, including from other states and surveys, to annually refine NREC priorities that guide the Research Committee in shaping RFPs for the next funding cycle

OUTREACH

Priority Issue

Track the adoption, implementation and effectiveness of NLRS practices and other potential best practices, including through partnerships


Objective

Pursue more coordinated efforts and tracking of best practices, cognizant of the Nutrient Loss Reduction Strategy, by defining roles of organizations responsible for developing, implementing and measuring best management practices

NREC RESOURCES FOR RETAILERS

THANK YOU FOR YOUR SUPPORT

www.illinoisnrec.org




Illinois Nutrient Research & Education Council

The Illinois Nutrient Research & Education Council (NREC) is Illinois agriculture's commitment to enhance nutrient utilization, increase crop production and protect water quality.

NREC was created in 2012 by Public Act 97-0960 and is managed by a Council of representatives from farm organizations, commercial fertilizer, specialty fertilizer, and the Illinois Department of Agriculture. Members of several environmental organizations also provide input to the Council and help bridge the communication gap between the two segments. The funds collected under this act were previously collected by the Illinois Department of Agriculture but were consistently swept into the general state budget and not available for research programs. Through efforts of the industry, Illinois NREC was formed and has worked to ensure that these funds are available for research.

Fertilizer Assessment



• NREC = IDOA

A total of \$1.00/ton of fertilizer sold is collected by retailers.

- \$0.25 stays with the Illinois Department of Agriculture to administer the Fertilizer Regulatory Programs in the state
- \$0.75 goes to NREC for investment into nutrient research and outreach programs

\$0.25 to IDOA	\$0.75 to NREC
Fertilizer Regulatory Program	Fertilizer Research
Promotes adequate labeling for the safe and effective use of fertilizer for protection of soil and water resources.	Focus on three main areas: Maximize Efficiency, Minimize Losses, Mitigate Environmental Impacts
Anhydrous Ammonia Regulation	Outreach & Education
Safety inspections	Communicate key nutrient efficiency practices to producers, retailers, and other stakeholders
Oversight of NRE facility construction	
Examination of tanks	
Review safety products	

Since its inception in 2012, Illinois NREC has invested over \$10 Million into nutrient related research that is being funded through NREC. Illinois agriculture is working together to meet the Nutrient Loss Reduction Strategy. Without this funding, the industry would be without critical resources to improve the efficiency of agricultural nutrients while minimizing any possible negative impacts to the environment.

Learn more by visiting www.illinoisnrec.org where you can see a full listing of current projects and see other priority areas being studied.

