Your Agriculture – Your Water– Your Future STUDY RESULTS FAQ SHEET

Lake Bloomington and Evergreen Lake serve as drinking water reservoirs for nearly 80,000 residents of the City of Bloomington, Towanda, Hudson, and Bloomington Township. The watersheds contributing to these reservoirs are predominantly agricultural, and at certain times of the year, farmland in the watershed contributes high levels of nitrates to these reservoirs. High nitrate levels can increase the cost associated with providing clean, safe drinking water. Runoff also carries sediment, which can reduce the water storage capacity of the reservoirs, and phosphorus, which can contribute to summer algal blooms.

This survey of Lake Bloomington and Evergreen Lake agricultural landowners was conducted by the McLean County Soil and Water Conservation District, in partnership with The Nature Conservancy and Illinois State University, with funding from the Walton Family Foundation. These and other partners from the City of Bloomington and the U.S. Department of Agriculture (USDA) are actively working to provide additional opportunities and resources to cost effectively increase conservation practice adoption and improve water quality.

Who participated in the study?

A full census of 179 landowners in the Lake Bloomington and Evergreen Lake Watersheds were mailed a self-administered survey. A total of 89 individuals completed the survey for an overall response rate of 50%. However, 19 indicated that they did not own land in the watershed so the final participation rate was 39% (N=70). Respondents ranged in age from 25-91 years, with a mean age of 62. Over 50% had a four-year degree or higher, and the mean length of residence was 35 years.

What did the study find?

General Use of Conservation Practices

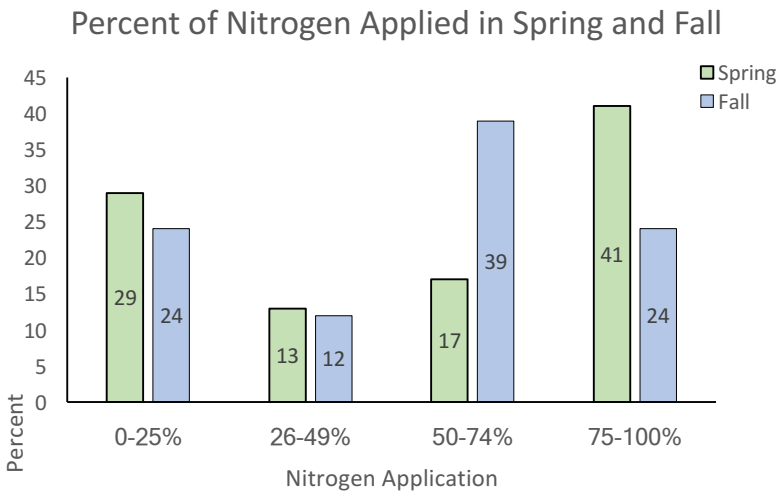
The most commonly used conservation practice by acreage is grass waterways, used by 29% of respondents on 100% of their land. Almost 50% of respondents use this practice on 50% or more of their land. Filter strips are the next most commonly used practice, used on at least 25% of farmland by 43% of respondents.

Saturated buffers are the least commonly used practice, with 98% of respondents indicating that they do not use this practice on any of their acreage, following by constructed wetlands which were not used on any acreage by 91% of respondents.

Practice	Percentage of all land under practice				
	0%	25%	50%	75%	100%
Grass waterway	19%	32%	10%	10%	29%
Filter strip	57%	29%	4%	2%	8%
Saturated buffer	98%	0%	0%	2%	0%
Constructed wetland	91%	7%	0%	0%	2%
Other_____	0%	25%	0%	0%	0%

Use of Spring vs. Fall Nitrogen Application

Nitrogen application appears to be somewhat variable between spring and fall applications. Results showed that 41% of respondents applied 75-100% of their nitrogen in the spring compared to 24% of respondents that indicated they applied 75-100% of their nitrogen in the fall. The more common practice was to apply 50-74% of nitrogen in the fall. Overall, it appears that use of spring nitrogen application is increasing among respondents. Finally, 62% of respondents indicated that they side-dress nitrogen.



Barriers to Adopting Cover Crops, Reducing Fall Nitrogen, and Adopting Constructed Wetlands

Cover Crops: The biggest obstacle to adopting cover crops related to *economics: concern for loss of farming revenue*, followed by *application/adoption processes conflicting with spring planting or fall harvest* and the *need for additional herbicide*. The least important barrier was concern over negative feedback from neighbors and other farmers.

Reducing Fall Nitrogen: *Concern for ability to apply nitrogen in the spring due to wet weather* was the largest obstacle followed closely by *concern with ability to apply in the spring due to competing responsibilities*.

Constructed Wetlands: The biggest perceived barrier to constructed wetlands was *economic: concern for taking land out of production, perceived permanence of the practice, and concern for loss of farming revenue*.

Overall, *economics (loss of land for production, cost of practices*) seem to be the largest obstacles to adoption of conservation practices while perceptions of neighbors and other farmers were not considered obstacles. Financial and technical assistance were seen as the most important incentives to adoption of these practices, whereas, seeing the practice in use by others was viewed as least important.

How will the data be used going forward?

Data from this study will be used in several ways to support producers by:

- Demonstrating current efforts by local producers and landowners to reduce nutrient losses from farmland,
- Identifying management strategies and conservation programs that are of greatest interest to area producers and landowners,
- Documenting perceived barriers to implementing new management strategies and to participating in conservation programs, and
- Developing new outreach approaches, technical assistance and tools to catalyze voluntary implementation of practical and effective conservation strategies.

For a copy of the full study report, please visit www.mcleancountyswcd.com.
Any questions can be directed to
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Project Partners

The Nature Conservancy

McLean County Soil & Water Conservation District

Illinois State University
Illinois' first public university