

VERMILION HEADWATERS NITROGEN INVENTORY

The headwaters of the Vermilion-Illinois River Basin drain over 254,000 acres of Ford and Livingston Counties. These acres form the Vermilion Headwaters Watershed (VHW), which was identified by the Illinois Nutrient Loss Reduction Strategy (IL NLRS) as one of the highest non-point source nitrogen (N) loading watersheds in IL. Farmers in the region are already responsible land stewards but meeting the water quality goals set by the IL NLRS will require management changes on nearly all farmed acres across the state.

The producers, ag professionals, area residents, government agencies and non-profit organizations that comprise the VHW Partnership are working to further increase the efficiency of local N-management. The in-field practices identified in this factsheet reduce nitrate loss from fields without sacrificing farm profitability. Please see the back of this sheet for a list of area N retailers who can assist in maximizing the efficiency of your N program!



Ford

Scan to learn more



Over 50% of ag fields in the Vermilion Headwater Watershed are tile drained. Tile drainage significantly increases the potential for nitrogen to enter waterways, particularly when rain falls on a field without an active cover crop.



The Illinois NLRS calls for a 15% reduction in N loading to IL waterways by 2025, with an eventual goal of a 45% reduction.



Nitrates in our rivers and streams increases municipal water treatment costs, lowers property values, threatens wildlife and public health, & prohibits recreation.

ESTIMATED N REDUCTIONS FROM IN-FIELD MANAGEMENT PRACTICES

Annual non-point source nitrate-N loss from the VH Watershed is estimated to be 23 lbs./ac, according to the IL NLRS. That's nearly 6 million lbs., or over \$2 million worth of N not being used by crops each year!

IN-FIELD MANAGEMENT PRACTICE	% N SAVED
COVER CROPS	30%*
SPRING ONLY N APPLICATION	15-20%
REDUCING N APPLICATION RATES TO MRTN RECOMMENDATIONS	10%
FALL INHIBITOR USE	10%
SPLIT N APPLICATION (50% FALL/50% SPRING)	15-20%

RIGHT TIME

MAKE NUTRIENTS AVAILABLE WHEN CROPS NEED THEM

Fertilizer should never be applied to frozen or snow-covered ground. All fall NH3 applications should be made with an inhibitor and when the 4-inch soil temperature is below 50° F. Split preplant/side-dress applications in spring can increase net returns & ensure that N applied is there when the crop needs.

RIGHT PLACE

KEEP NUTRIENTS WHERE CROPS CAN USE THEM

Keep N in your field by planting over wintering cover crops.
Overwintering covers ahead of corn can take up N mineralized after soybean harvest, making it available to future crops. Nitrification inhibitors also help keep N in place and should be used if applying N without an active crop, regardless of season.

RIGHT SOURCE

MATCH FERTILIZER
TYPE TO CROP
NEEDS

MRTN rates incorporate any form of N applied, including DAP, MAP and AMS. Triple-Super Phosphate is a good P source if applying in the fall when the N made available from MAP or DAP may be more susceptible to loss. Effort should be made to factor all sources of N applied into rate calculations.

RIGHT RATE

MATCH AMOUNT OF FERTILIZER TO CROP NEEDS

The Maximum Return to Nitrogen (MRTN) rate uses current corn and fertilizer prices to determine optimal N rates and can be found at: cnrc.agron.iastate.edu/N applications over MRTN do not always lead to higher profits, in fact, farmers may decrease their net income by over \$20/acre if applying N above MRTN recommendations.

ASK YOUR LOCAL RETAILER HOW THEY CAN ASSIST YOU IN ADAPTING YOUR N-MANAGEMENT STRATEGY

FERTILIZER DEALER (LOCATION)	CONTACT	Nitrogen Forms				Application Methods		
		Anhydrous Ammonia	UAN 32	Urea	ESN	Side- dress	Y Drops	VRT N
Brandt (Fairbury)	Brad Schmidgall	*	*	*		*	*	*
Nutrien Ag Solutions (Fairbury)	Matt Durdan	*	*	*	*	*	*	*
Evergreen FS, Inc. (Forrest)	Matt Thomas	*	*	*		*	*	*
Trainor Grain & Supply Company (Wing)	Mike Trainor		*	*		*	*	*
Evergreen FS, Inc. (Cullom)	Glenn Zehr	*	*	*		*	*	*
Nutrien Ag Solutions (Saunemin)	Eric Green	*	*	*	*	*	*	*
Sun Ag, Inc. (Cullom)	Georige Mayo	*	*	*		*	*	*

For more information about the VHW Partnership and how you can get involved please contact:



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