

Improving Water Quality and Crop Yields through Managed Tile Drainage Systems in the Conservation Districts of DeWitt, Ford, Iroquois, Livingston, Macon, McLean and Piatt County

A Geographically-Focused Cooperative Conservation Project between the National Association of Conservation Districts (NACD) and Ecosystem Services Exchange (ESE), with funding support from the National Fish and Wildlife Foundation (NFWF) and collaboration and cooperation with local soil and water conservation districts.

What is the management of tile drainage systems?

- Use of efficient and cost-effective conservation drainage practices to manage tile discharge and soil water table elevations to:
 - reduce nutrient transport to water bodies, thereby improving water quality.
 - improve crop yields and farm economics.

What does an eligible farmer who participates receive?

- Expert technical services for site assessment and selection, planning, and shovel-ready engineering design of select automated and manual conservation practices: **drainage water management, denitrifying bioreactors, and saturated buffers.**
- An estimated \$8,000 value at no-cost to landowner(s).
- Completed shovel-ready designs to use in applying for conservation program financial assistance for the installation of one or more of these conservation drainage practices through the work of a qualified land improvement or drainage contractor.

What farmers are eligible to participate?

- Farmers in seven Illinois River Basin counties (DeWitt, Ford, Iroquois, Livingston, Macon, McLean, and Piatt) who have:
 - a well-functioning tile drainage system on cropland that is technically feasible for use with one or more of the designated conservation drainage practices.
 - eligibility in accordance with the Conservation Compliance Provisions of the Farm Bill, and other applicable environmental laws and regulations.

What is expected of a farmer who participates?

- Cooperate fully with ESE regarding site assessments and the planning/design of farmer-selected, feasible conservation drainage practices, which may include automation if desired: **drainage water management, denitrifying bioreactors, and saturated buffers.**
- Sign a simple standard agreement with ESE to ensure the farmer has a full understanding of the participation requirements, including: what he/she will receive, when, and how; and commits to apply for conservation program financial assistance upon design completion to seek support for practice installation, or to apply the practice without financial assistance.
- Improve crop yields and farm economics.

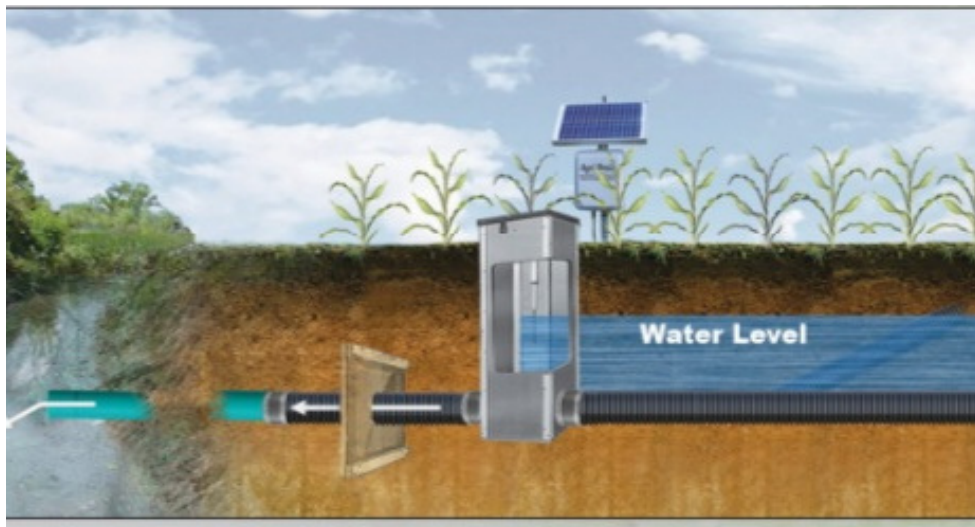
How will this conservation work be carried out on my farm if I participate?

- Eligible landowners, at no cost to them, will work directly with ESE's certified conservation planners to:
 - arrange for a site assessment of field(s) for technical feasibility determinations and a full discussion of the opportunity for participation.
 - enter into an agreement with ESE that confirms the farmer will apply for conservation program assistance to install the practice(s) or apply the practice absent this assistance if he/she chooses.
 - prepare a conservation plan and shovel-ready engineering design to guide installation of selected eligible conservation drainage practices.

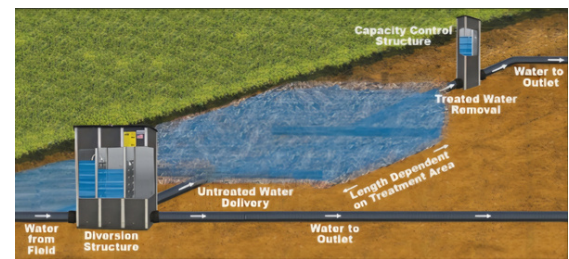
How do I benefit by participating in this cooperative conservation project between ESE and USDA NRCS?

- Expert technical services to conduct site assessments, planning, and engineering design of eligible conservation practices determined feasible for your selected field(s), at no cost to the landowner.
- No landowner out-of-pocket costs for ESE's technical services for a completed shovel-ready engineering design.
- On-farm benefits, including crop yield increases and production risk reduction.
- Off-farm downstream improvements to water quality once a practice is installed.

DRAINAGE WATER MANAGEMENT



SATURATED BUFFER



BIOREACTOR

Kate Schafer
Conservation Drainage Coordinator, ESE
(515) 771-2496
kate@echexch.com

The views and conclusions contained in this document are those of the author's and should not be interpreted as representing the opinions or policies of the U.S. Government or the National Fish and Wildlife Foundation and its funding sources. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government or the National Fish and Wildlife Foundation or its funding source.