

Defiance County (Lost Creek Watershed) Conservation Drainage Turn-Key Project

The Lost Creek Watershed Turn-Key Project is an innovative approach to deliver conservation drainage practices quickly and easily at no cost to the producers. This project leverages conservation funding, local partners, and technical service providers to accelerate and demonstrate the implementation of automated drainage water management in the Lost Creek Watershed (Defiance Co.).

Eligibility

- Drained farmland within the Lost Creek Watershed
- May be installed on new, planned, or existing pattern drainage system outlets
- Existing control structures may be eligible for an upgrade and retrofit



Benefits of Automated Drainage Water Management

- 5-15% potential yield increase
- Reduction of net discharge, nitrate, and phosphorus loads
- Increased responsiveness to weather variability
- Better soil water management due to controlling when (or when not) to drain
- Ability to close/open drain outlets remotely from your computer/phone, especially for those hard-to-reach outlets and busy schedules
- Stay informed about soil water conditions by monitoring water levels from your computer/phone

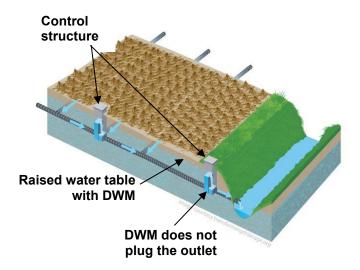
Landowner Highlights:

- Automated drainage water management options designed and installed at no cost.
- Quick and easy process; no waiting for ranking or contract obligation. Go from initial site visit to completed installation in as little as a few short months.
- Work with knowledgeable and experienced partners to design your automated drainage systems.
- No hassle installations. We will coordinate with your preferred contractor, or find one for you, so you don't have to. The project pays contractor costs directly, so you don't have to manage invoicing, receipts, or reimbursements.
- Improve water quality and increase crop yields with automated drainage water management. Store water during dry periods and drain when it's wet.

How Turn-Key Works

With a turn-key project, participants avoid having to deal with complicated programs, applications, rankings, cost-share reimbursements, or policies. Funding for the program is already allocated and project partners are already committed to complete the project objectives. This creates a project that operates quickly and efficiently to work with interested participants to get conservation installed on the ground. The entire process for an individual project can be completed in as little as a few short months, and can be broken down into the following steps:

- Initial Evaluation and Assessment Interested participants should reach out to the Defiance Co. SWCD, who will collect some initial information about the field and pass that along to staff at Ecosystem Services Exchange (ESE). The planners and engineers at ESE will conduct a remote site assessment to determine suitability for drainage water management and provide recommendations to the participant.
- 2. <u>Signed Agreement</u> Provided the participant has a suitable site and wants to proceed, the producer will sign an agreement with ESE to complete the survey, design, and installation of the proposed drainage water management project.
- 3. <u>Survey and Design</u> With an agreement in place, ESE will complete an on-site survey to collect elevation data and information on any existing drainage infrastructure. ESE will then complete a design of the drainage water management system and provide this to the participant for approval.
- 4. <u>Installation and Oversight</u> Once the participant approves the design, ESE will work with a preferred contractor, or will find a contractor, to complete the installation. ESE will provide coordination, oversight, and automation setup to ensure the installation goes smoothly. Completed as-built documents will be provided to the participant and payment will be made to the contractor.
- 5. <u>Operation and Management</u> Following the completed installation, ESE will have an in-person or virtual meeting with participants to review the operation and management of the new automated drainage water management system.



Drainage water management allows you to open or close your drain outlet to better management soil water conditions in your field. Open the drain to remove excess water from the field and complete field activities. Close the drain to capture and store water in the soil profile, providing more water for crops during the summer and improving water quality. And now with automation, create a Smart Drainage System to establish and maintain a target soil water level throughout the year from a computer or tablet.

Project Partners













