

Jefferson County Land and Water Conservation Department Annual Report 2024

The purpose of the Land and Water Conservation Department (LWCD) is to provide for the conservation of soil and water resources of Jefferson County. The LWCD is charged with administering state statutes and county ordinances that conserve and protect our natural resources.

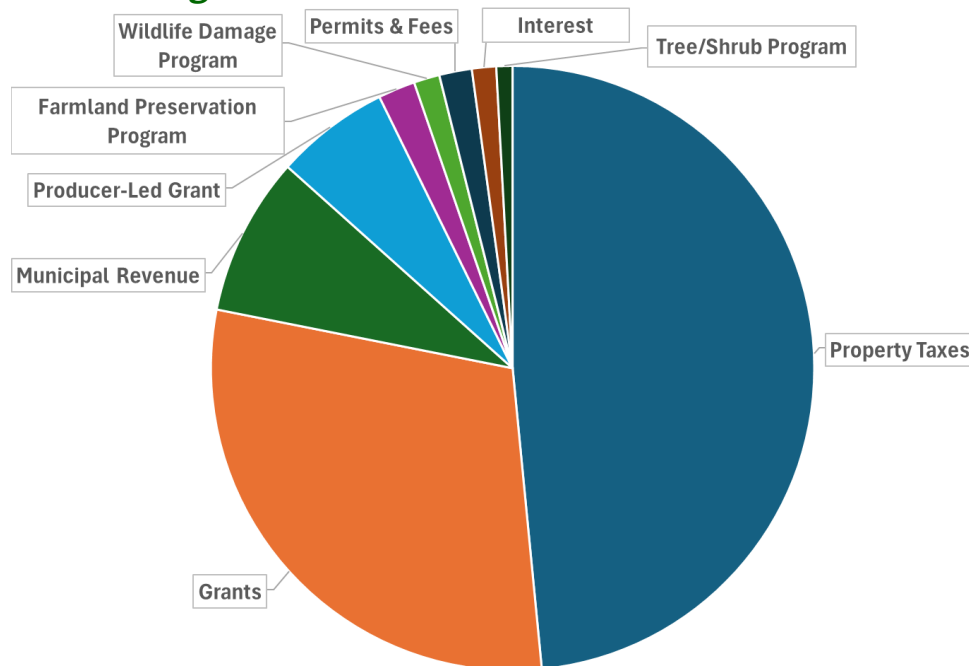
2024 Land and Water Conservation Committee Members

Meg Turville-Heitz (Chair), Matt Foelker (Vice-Chair) (UWEX Member), Margaret Burlingham (PACE Rep), Walt Christensen, Elizabeth Hafften (UWEX Member), Cassie Richardson, and Scott Schultz (Ag Rep)

Land and Water Conservation Department Staff

Patricia Cicero (Director), Joe Strupp (Resource Conservationist), Sam Peterson (Resource Conservationist), Dave Hoffmann (Resource Conservationist), Colton Hutchinson (Water Resources Management Specialist), and Kim Liakopoulos (Administrative Specialist)

2024 Department Funding



Land and Water Resources Management Plan

Required by the Department Agricultural, Trade and Consumer Protection, this plan makes the LWCD eligible to receive staffing and conservation practice funding. Updated in 2021, the plan lays out the mission, goals, and work plan for the LWCD. Practices installed in the last 5 years:

- 2020 projects: 1 grassed waterway (563 ft), 2 manure storage closures, 1 well closure, and 1 shoreline stabilization (70 ft)
- 2021 projects: 1 nutrient management plan (163 acres)
- 2022 project: 1 well closure
- 2023 project: 1 well closure
- 2024 project: terrace system contracted, to be installed in 2025

Cover Crop and Pasture Establishment Cost-Share Program

The cover crop and pasture establishment cost-share programs are funded by municipalities who are required to reduce phosphorus. In 2024, contracts were signed to fund the following:

- 1,799 acres of cover crops
- 15 acres of pasture establishment

Jefferson County Soil Builders

The LWCD is the fiscal manager and collaborator for the Jefferson County Soil Builders whose vision is to inspire farmers to keep soil in place, nutrients in the fields, and waters clean. The LWCD assisted with educational events and cost-sharing of cover crops. In 2024, the following was achieved:

- 417 acres of multi-species cover crops planted after wheat harvest
- 413.6 acres of cover crops planted at other times of the year
- 2 field days, and 1 winter workshop in partnership with 4 other producer-led groups

Farmland Preservation Program

The Wisconsin Farmland Preservation Program offers farm owners a Wisconsin income tax credit in exchange for compliance with state conservation standards that protect soil and water resources. LWCD works with landowners and producers to ensure they meet program requirements. The tax credit is calculated as a flat, per acre rate. In Jefferson County, most landowners receive \$10.00/acre. Landowners located in an Agricultural Enterprise Area (AEA) can sign a 15-year agreement with the State and receive \$12.50/acre. An AEA is created when landowners petition the state to create an area dedicated to long term agricultural use.

- 616 total FPP participants covering a total of 110,389.05 acres
- 6 AEA agreements covering 805.7 acres (located in parts of the Towns of Palmyra and Sullivan)
- \$1,113,962 total tax relief to Jefferson County landowners

Agricultural Performance Standards

State law (NR 151) identifies minimum standards that agricultural producers must follow. These rules regulate manure management and require soil conservation and nutrient management plans. LWCD works with producers to help them achieve compliance with the laws.

- Received nutrient management plan checklists from 1,067 landowners covering 114,957 acres
- Received and investigated 6 manure complaints: 2 compliant with laws, 1 became compliant, 1 is working on compliance, and LWCD staff are working with 2 landowners on compliance.

Livestock Siting

Under state law (ATCP 51) and the Jefferson County Zoning Ordinance, livestock producers who expand their animal numbers over 150 animal units must complete an application and worksheets. LWCD ensures these materials are complete and meet state standards before the farms can apply for a conditional use permit through the Zoning Department. There is an amendment process when changes are made but livestock numbers stay under the permitted levels.

- 26 farms in Jefferson County have livestock siting conditional use permits
- 1 amendment to an existing permit in 2024

Nutrient Management and Farmer Education Classes

State law (NR151.07) and the Farmland Preservation Program require that all cropland where nutrients are applied be covered by a nutrient management plan. These plans must be updated annually to account for crop rotation and changes in fertilization. LWCD offers classes to teach farmers how to write and update their plans. In 2024, there were: 3 classes, 11 pupils.

Agricultural Conservation Easement Program

The Agricultural Conservation Easement Program permanently protects working farms from non-agricultural development through purchase or donation of development rights. LWCD assists landowners with the process and documentation of conservation easement applications to protect agricultural land and natural resources from development. Work includes securing grant funding, completing land transactions, mapping requirements, annual inspections, and reporting.

- Since the program's inception: 5 purchased easements totaling 873.62 acres and 5 donated easements totaling 248.83 acres
- 14 interested applicants
- 98-acre farm easement in the Town of Concord set for closing in 2025

Water Resource Planning and Protection

The LWCD plans and implements projects in partnership with local resource organizations and municipalities to protect and improve water resources. Work includes collecting data, educating the public, developing management plans, and implementing conservation practices.

- 1 shoreland garden installed with grant funding from the Department of Natural Resources
- Education to multiple landowners on water-friendly projects along shorelines
- Reviewed shoreland plant restoration plans for Zoning Department permits
- Implemented streamflow and nutrient sampling of Rock Creek with Rock Lake Improvement Association to determine phosphorus loading
- 2 aquatic plant surveys: Lower Spring Lake and Lake Mills Millpond
- Conducted an assessment of the wetlands adjacent to Rock and Mud Lakes

Invasive Species Management

Since 2021, the LWCD has received an annual Department of Natural Resources (DNR) grant to fund invasive species education, management, and control work. In 2024 the following was accomplished:

- Trained citizen volunteers performing early detection surveys on Rock Lake
- Educated the public on preventing aquatic invasive species, including implementing a Clean Boats, Clean Waters Program on Rock Lake (420.24 hours at boat launches)
- Completed a DNR-funded project to control a phragmites population next to Rock River and reseed with native vegetation
- Produced press releases and social media posts relating to local invasive species education
- Participated in statewide education events and meetings, including Landing Blitz and Snapshot Day
- Conducted an inventory of 30 aquatic invasive species signs at water access locations
- Partnered with Jefferson County Parks to purchase materials for 7 boot brush stations and 3 boat cleaning stations with ARPA funding that will be set up at Jefferson County park locations in 2025

Surface Water Quality Monitoring

LWCD trains, equips, and supports citizens who monitor lakes and streams. Results are tracked and shared with partners and citizens. In 2024, the following was accomplished:

- Training events: 5 stream sampling, 2 lake sampling, and 1 invasive species monitoring
- 7 lakes were monitored, 21 stream sites were monitored

County-Wide Groundwater Education

LWCD received ARPA funds to conduct a county-wide groundwater study that was completed in 2024.

- Final report and online interactive dashboard of results were completed
- Partnered with the Health Department to use nitrate screening tools that inform citizens whether they should obtain lab analysis of their groundwater for nitrates: 50 well samples screened, and 17 lab tests recommended

Non-Metallic Mining Reclamation Permitting

Under state law (NR 135) and the Jefferson County Ordinance, non-metallic mines must have a permit to extract materials and ensure subsequent reclamation of mined land. LWCD ensures that the mines and the reclamation plans meet standards. 2024 numbers:

- Inspected 24 active mine sites
- 565.30 acres of open mining land, including 17.2 acres of newly exposed mining extractions in 2024
- 6.7 acres of land reclaimed, including one complete reclamation of a 4.8 acre sand and gravel mine

Tree Program

LWCD administers an annual tree and shrub sale for citizens, and tree planter and sprayer rental.

- 2023/2024 sale offered 7 species with 4,700 trees/shrubs sold
- 2024/2025 sale offered 8 species with 5,400 trees/shrubs sold

Other Programs and Projects

- Continued work on Conservation Reserve Enhancement Program in partnership with the Farm Service Agency and the Wisconsin Department of Agriculture (DATCP) to assist landowners with implementing stream buffers, wetland restorations, and other riparian conservation practices.
 - 8 onsite inspections with DATCP staff: 1 site was compliant, 6 sites were compliant with some management needed, and 1 site was in violation
 - 6 inspections to review past violations: 5 became compliant and 1 is working on compliance
- Continued work partnering with the City of Watertown and Rock River Coalition on installation of agricultural conservation practices to provide Watertown with phosphorus and sediment credits for their Department of Natural Resources (DNR) permit.
 - Meetings with DNR and Watertown to work through water quality trading guidance
 - LWCD worked with landowners to determine eligible lands and conservation practices
 - Water quality trading plan approved by DNR
 - Successfully completed first trade with a landowner: 10.1 acres of a harvestable filter strip resulting in reductions of 78.25 lbs./year of phosphorus and 8.71 tons/year of total suspended sediment
- Provided expertise on land and water issues regarding solar farms
- Communicated with farmer of the County-owned farmland and various contractors about construction activities to limit negative impacts to farming
- Developed, customized, and maintained applications for data tracking of LWCD programs. This enables us to perform the required reporting for State grants
- Served as a pass-through for funds in both the Wildlife Damage Abatement Program (reimburses farmers for crop loss) and the Deer and Turkey Donation Program (meat supplied to food pantries)
- Attended Jefferson County Drainage Board meetings

Jefferson County Land and Water Conservation Department
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