

Jefferson County Land & Water Conservation Department 2018 - 2019 Annual Report

Since 1946, Jefferson County has been providing assistance to landowners to protect our soil and water quality. In 1982, the County officially established the Jefferson County Land & Water Conservation Department (LWCD). The department has been charged with administering State Statutes and County ordinances all leading to the conservation and protection of our natural resources. Anyone wishing further information on any of our programs is welcome to stop in or call the Land & Water Conservation Department for more details.

Wisconsin's Farmland Preservation Program

The Wisconsin Farmland Preservation Program offers farm owners a tax credit for protecting our State's soil and water resources. Landowners receive the credit on their Wisconsin Income Taxes in exchanged for compliance with the State Conservation Standards.

The tax credit is calculated as a flat, per acre rate. In Jefferson County, most landowners receive \$7.50 per acre. Those landowners who are located in an Ag Enterprise Area (AEA) can sign a 15 year agreement with the State and receive \$10.00 per acre. An AEA is created when landowners join together to petition the State to create an area dedicated to long term agricultural use. Jefferson County has one AEA located in parts of Palmyra and Sullivan Townships. Currently there are 6 farms covered by an agreement with the State covering 755.72 acres.



Oakland Township

To be eligible for Farmland Preservation, the landowner must be a Wisconsin resident and file Wisconsin income taxes. The land must be zoned exclusive agriculture or natural resources, must produce average gross farm receipts of \$6,000 annually, and be in compliance with the following Non-point Runoff Rules:

- ◆ All farms must have and follow an approved conservation plan.
- ◆ All farms must have and follow an approved nutrient management plan.
- ◆ All livestock farms must meet manure management prohibitions and performance standards.
- ◆ No significant discharge of processed wastewater to waters of the State.
- ◆ Pastures with stocking rates of over one animal unit (1 AU = 1000 pounds) must be included in the nutrient management plan.
- ◆ A minimum 5 foot tillage setback from the top of the channel of any surface water.

In Jefferson County, the Department has evaluated all participating landowners for compliance. The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has mandated the Department issue Certificates of Compliance to all participants. The Certificate must be submitted with the landowner's Schedule FC-A filing to claim the Farmland Preservation tax credit. The Certificate only needs to be submitted to the Department of Revenue once and is valid indefinitely until there is a change in ownership or acreage.

At the time of writing, there were 648 participants in Jefferson County covering 109,345.817 acres. This translates into \$821,985 of tax relief being brought back to Jefferson County (this total includes extra tax credit for lands located in the AEA). DATCP requires that each farm be inspected at least once every four years. In 2010 the Department streamlined the status review process by dividing the County into four quadrants. Doing so has made for efficient use of time and savings in fuel usage. In June 2019, we conducted 188 reviews in the South-west quadrant. We added 12 new participants, issued 14 Notices of Non-compliance (including Voluntary Non-participation Notices), and processed 2 Cancellations of Non-compliance. Additionally, 197 Certificates of Compliance were issued (both new and reissues).

Conservation Standards & Livestock Operations

Under State Statute NR 151, agricultural producers are required to follow conservation performance standards. These rules regulate manure management and require the use of soil conservation and nutrient management plans by all producers. NR 151 was recently revised to include two new standards for animal livestock producers. Pastures must be included in a farm's Nutrient Management Plan [unless stocking rates are 1 Animal Unit (one animal unit equals 1,000 pounds of animal weight) or less per Acre] and there must be no significant discharge of process wastewater (egg wash water, milk house waste, etc.) to waters of the State.

Additionally, under State Statute ATCP 51 and County Zoning Ordinance, livestock producers with a herd of over 150 animal units must apply for a Livestock Siting Conditional Use Permit. The Department works cooperatively with the Jefferson County Zoning Department on these permits.

If livestock producers are not expanding their animal numbers but are building, modifying or abandoning manure storage facilities and are under 150 animal units, the Department requires a permit under the County Manure Storage Ordinance.

For the report year the Department:

- ◆ Reviewed 3 new Livestock Siting Permit Applications, 5 Amended Permit Applications, and provided completeness determinations for all of them to the Zoning Department and Committee.
- ◆ Investigated 7 manure management or spreading related complaints with corrective action and education taken as needed.
- ◆ Cost shared a clean water diversion for an landowner to keep clean water away from the animal lots.
- ◆ Made two offers of Cost-share for Nutrient Management Planning.
- ◆ Received 590 checklists covering 1,171 farms with a nutrient management plan for compliance with State Statute and County Ordinance.
- ◆ Inspected 3 Manure Storage Structure Abandonments for construction compliance.
- ◆ Observed 1 Manure Storage Structure installation for construction compliance.

Nutrient Management & Farmer Training

Wisconsin State Statute NR151.07, as well as the Farmland Preservation Program requires that all cropland where nutrients are applied be covered by an approved nutrient management plan. These plans must be updated each year to account for crop rotation and changes in fertilization. Soil tests are required to be taken once every four years. Plans are typically written by crop consultants however the State allows for producers to write their own plan if they attend a Department of Ag approved training course.



Department staff began offering nutrient management training classes in 2010 using SnapPlus software developed primarily by the University of Wisconsin. These full classes consist of three 3-hour long classes. Additionally, each winter Department staff offer a series of update classes to assist producers in completing their upcoming year's plan. The update classes are each three hours long.

No full classes were held in winter of 2018/19 however update classes were held with 13 people participating.

Wildlife & Habitat

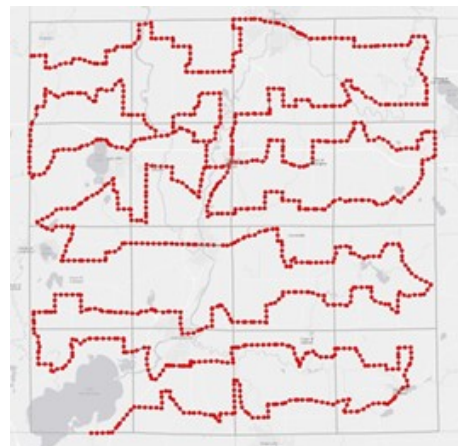
The Land & Water Conservation Department engages in the following activities to enhance wildlife habitat:

- ◆ Assists with the Wildlife Damage Abatement Program (APHIS).
- ◆ Deer (Venison) Donation Program.
- ◆ Turkey Meat Donation Program.
- ◆ For the 2018/2019 program year, 4,700 trees/shrubs were sold through the Annual Sale. Seven species were offered through the sale which starts in the fall of each year.
- ◆ Habitat planning and development including resources for landowners who live along lakes & streams.

Survey of Crop & Tillage Systems - Transect Survey

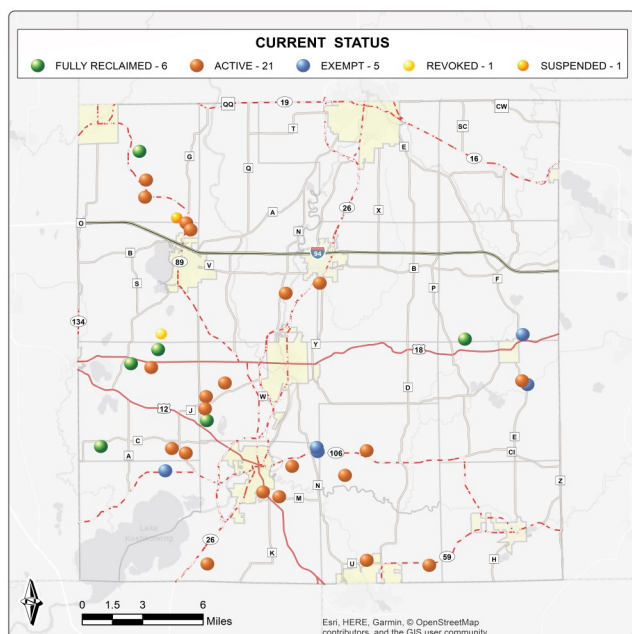
Data acquired at over 786 observation points, utilizing SnapPlus Software for annual cropping data and field level information:

- ◆ 70% of the cropped acreage was calculated at or below tolerable soil loss, dropping 10 percentage points from last year.
- ◆ The countywide median for soil loss was 3.0 tons/acre/year - up nearly a half ton per acre over last year. The average tolerable soil loss for all fields in the survey is 4.3 tons/acre/year. The percentage of locations that are predicted to be at 2 X the soil loss threshold continues to increase, coming in at nearly 12%. Heavier spring rain events which may account for areas of increased tillage and soil washing.
- ◆ 39% of cropland was planted to corn, down from 41% in 2018.
- ◆ 38% of cropland was planted to soybeans up from 34% in 2018.
- ◆ 7% of cropland was in small grains (wheat, oats, etc.), a sharp increase from years past.
- ◆ Hay/Alfalfa made up 16%, and is slight increase for the year.
- ◆ 6% of cropland remained fallow with some areas being too wet to plant at time of survey, while the remaining 2.5% was either pasture or specialty crops.
- ◆ Over 40% of the cropland was shown as using some form of a minimum tillage system.
- ◆ Less than 25 % of the land was completely no-tilled, down from 2018, while a small percentage was shown using an alternate system - vertical or strip tillage.
- ◆ Just over 40% of fields showed a chisel/disk system being used, up considerably from prior years. Some fields have shown tillage activity to assist with decreasing soil moisture or weed control.
- ◆ Well over 40% of the working cropland had residue levels of 50% or more, while close to 40% of the cropland showed residue levels of less than 30%.



Non-Metallic Mining Reclamation Permitting NR135

- ◆ Fees collected: \$13,340 of which \$2,225 was reimbursed to the DNR and the remainder (\$11,115) earmarked for LWCD administrative expenses.
- ◆ 33 sites inspected, to include active, inactive, recently reclaimed, and exempt extraction sites.
 - ◆ Inspected 21 active sites: 1-5 acres 4 permits, 6-10 acres 5 permits, 11-15 acres 3 permits, 16-25 acres 4 permits; 26-50 acres 1 permit, > 50 acres 4 permits; 5 exempt sites.
 - ◆ Plan Modifications & Certified Reclamation: received 11 plan modifications to allow for reclamation fill material in accordance with State rules; 2 operators request for financial assurance release and Certification of Completion, and found to have satisfied planning standards and permit requirements.
 - ◆ Permit Revocations & Violations: 1 permit remains revoked along with the Zoning permit. Stark Pit - former BR Amon site - undergoing mitigation steps to meet agreement, with landowner utilizing bonding money to restore site.
 - ◆ Maintained all changes in GIS database and associated tabular data, incorporated mobile mapping for annual monitoring.
 - ◆ Prepared Annual Newsletter to provide information and updates to operators and landowners.
 - ◆ Attended DNR organized training events and meetings.

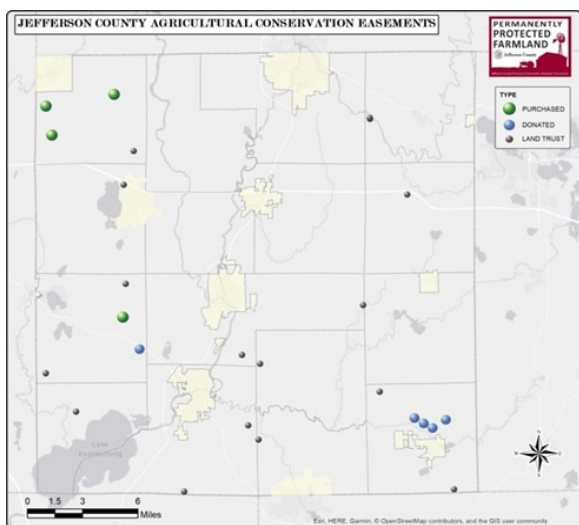


Mapping & Geographic Information System (GIS)

- ◆ Incorporated drone technology - *Unmanned Aircraft System* - to assist with field monitoring, regulation administration, preconstruction planning, and field mapping. Upgraded mapping grade GPS equipment to assist with field mapping and other location based data needs.
- ◆ Maintained and updated approximately 5,600 parcel records in the database management system for State Ag Run-off Rules (NR151) Nutrient Management compliance. This provides a cohesive data repository for the Working Lands Initiative compliance, and reporting to the State Department of Agriculture, Trade & Consumer Protection (DATCP) and Department of Revenue.
- ◆ Maintained and further developed a Farmland Preservation Program (FPP) landowner database to assist in quality control of the countywide parcel dataset containing over 3600 compliant parcels for tax credit participants. Maintained, enhanced and reformatted report generation tools for continued automation of the DATCP approved parcel compliance sheets. The county parcel data combined with reporting tools assists with information retrieval and continued development of automated reports/documents.
- ◆ Published, maintained and updated internet map services consumed by web map viewers to provide end users with location and attribute information. Testing and launch of a web map application using updated web protocols and interface with department generated data, for the purpose of providing specific information for department usage or other internal County stakeholders. Introduced mapping tools for data collection in the field and away from the office.
- ◆ Maintained and updated all Non-Metallic Mining related data.
- ◆ Converted location data and supplied mapping products for lake projects for Rock Lake, Lower Spring Lake, and Lake Ripley. Utilized various GIS analysis tools to provide required information and mapping products.
- ◆ Continued to work in partnership with the Land Information office in modernizing land records and associated datasets. Maintained and updated Frozen Parcel data for County Zoning purposes. Created and maintained all Conservation Easement Parcels. Maintained over 300 miles of snowmobile trail data for County Park's/Snowmobile Club planning, analysis, display and DNR programming. Assist with updating drainage district landowner listings and boundary mapping for the County Drainage Board. Continuation of processing and rectifying historic aerial photography.
- ◆ Provided mapping and data compilation for Agricultural Conservation Easement applications and monitoring requirements.
- ◆ Attended and participated in over 40 hours of training/seminars and meetings directly related to GIS, land records, and database administration.



Agricultural Conservation Easements (PACE) 2019



- ◆ Compliance Monitoring: 5 donated easement properties and 4 purchased easements held by the County, totaling over 1000 acres on 34 tax parcels.
- ◆ Completed application documents for submittal to NRCS for easement purchase – *at this time application is currently under review by NRCS staff and real-estate legal department.*
- ◆ Reviewed all public records relevant to agriculture, natural resources and easement compliance for the protected properties and updated required map data.
- ◆ Administered all Conservation Easement activities and documentation.

Jefferson County Water Resources

Maintaining and enhancing ground water and surface water quality is critical to the health, safety and recreational fulfillment of residents and visitors of Jefferson County. The Department has implemented the following water resources activities:

Aquatic Invasive Species (AIS)

Assisted the Town and City of Lake Mills in applying for DNR grants to hire 4 Clean Boats, Clean Waters inspectors to educate Rock Lake users on the laws that prevent the spread of aquatic invasive species. Trained inspectors, wrote media releases and participated in state-wide meetings regarding AIS programs.

Blue Spring Lake

Provided input on Blue Spring Lake's draft aquatic plant management plan.

Lake Ripley

Provided feedback on projects and reports to the Lake Ripley Management District.

Lower Spring Lake

Worked with the Lower Spring Lake Management District to implement their aquatic plant management plan. Conducted a plant survey. Planned and spoke at a public meeting to discuss a possible winter drawdown on the lake to reduce Eurasian water milfoil.

Lake Water Quality Monitoring

In the summer, perform monthly water quality sampling with a citizen to monitor temperature, dissolved oxygen, clarity, chlorophyll and phosphorus on Rock Lake. Communicated with the other citizen lake monitors regarding their sites and data.

Rock Lake Management Plan

Served as the project facilitator for the Rock Lake Improvement Association's DNR grant project to update the lake management plan, including facilitating committee meetings, running public input sessions, analyzing data, preparing meeting materials, obtaining information from experts, assisting with developing and implementing a public survey, and conducting an aquatic plant survey on Rock Lake. Completed the updated lake management plan and provided support for educating the public about the plan recommendations.

Rock Lake Exploration Cruise

Helped plan a pontoon and kayak tour to educate participants about the lake and resources. Tour stops included stations on water quality, native plant shoreland garden, fish, and aquatic plants.

Shorelands

Provided information on shoreland conservation practices to landowners. Wrote and secured a grant to install rain gardens at 2 Rock Lake properties.

Stream Monitoring

Worked with citizen volunteers to monitor streams in Jefferson County. In 2018 there were 28 people stationed at 17 sites on 13 streams in the County. Parameters monitored include temperature, dissolved oxygen, clarity, flow, and biotic index (based on the type of insects in the water). The work performed by citizens gives us information on the resources that we don't have the time/money to obtain ourselves. Worked with partners to plan and implement a day-long conference for lake and stream monitors.



Jefferson County Parks Department

Assisted with a number of items including equipping citizen stream volunteers with materials to share at the Mason Jar Jamboree, organizing citizens to pull garlic mustard at Korth Park, and providing input on shoreland issues at the old Highway site.

Jefferson County Zoning Department

Assisted with communications to citizens regarding shoreland-related issues. Provided information to the Zoning Department regarding shoreland zoning violations. Reviewed shoreland restoration plans to ensure they meet state standards.

Assistance to various landowners, organizations, and local governments

Work included communications regarding manure spreading concerns, lake and stream quality, surface water-related public health, water levels, water recreation and pier rules, aquatic invasive species, shoreline erosion control, wetland rules, and ground water quality.

Grants & Budget

Some funding for the Jefferson County LWCD comes from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). The Department actively looks for outside sources of revenue to reduce the amount of County Levy dollars requested.

- ◆ Applied for and received operational grants from DATCP totaling roughly \$175,000.
- ◆ The FPP certification and permit fees generate nearly \$20,000 in revenue to the LWCD.
- ◆ Received \$25,520 in Land & Water Resource Management cost sharing dollars from DATCP.
- ◆ Received \$14,000 in State Grant funding from DATCP for nutrient management cost sharing.
- ◆ County Farm rental rate per acre: \$209.25. New 3 year lease cycle will expire spring of 2021.
- ◆ Received \$2,200 Department of Natural Resources grant to fund Healthy Lakes practices.

Jefferson County Land & Water Conservation Committee

Matt Foelker (Chair), Walt Christensen (Vice-Chair), Ed Morse (Secretary),
Dan Herbst (UWEX Member), Mike Kelly (UWEX Member), Frank Anfang (FSA Rep),
and Margaret Burlingham

Jefferson County Land & Water Conservation Department

Patricia Cicero (Interim Director & Water Resources), Gerry Kokkonen (GIS & Land Use),
Nancy Lannert (Resource Conservationist), Kim Liakopoulos (Administrative Assistant),
and Joe Strupp (Resource Conservationist)

Partnering Agencies & Contacts: The Jefferson County Land & Water Conservation Department works cooperatively with a number of State and Federal Agencies.

Farm Service Agency (FSA): Deb Schutt (920) 605-3160

Natural Resource Conservation Service (NRCS): Kathy Turner (920) 605-3157

US Department of Ag (APHIS): (800) 433-0663

DATCP: Bureau of Land & Water Resources: (608) 224-4621

DNR Conservation Warden: Alex Brooks (920) 728-0367

DNR Lakes Monitoring Coordinator: Susan Graham (608) 275-3329

County Forester: Nicholas Koltz (608) 743-4830

Working Lands Initiative/Farmland Preservation Contacts

State Website: <http://workinglands.wi.gov>

State Email: DATCPWorkingLands@Wisconsin.gov

