

2017 WINNEBAGO COUNTY LAND AND WATER CONSERVATION DEPARTMENT ANNUAL REPORT



LAKE MANAGEMENT PLANNING CONTINUES FOR THE WINNEBAGO SYSTEM

By Chad Casper, Resource Conservationist

Level of the commitment made to work together to support and promote



beautification, restoration, promotion, and general upkeep of the waters that comprise the lakes of the Winnebago System. Winnebago, Fond du Lac, and Calumet counties have committed funds and entered into an Intergovernmental Cooperation Agreement to move the LMP forward. These three Counties have contracted with the Fox-Wolf Watershed Alliance (FWWA) to help advance the LMP. The funds from the counties have been used by FWWA as leverage for pursing grants and other funding.

A Kick-off Celebration was held in early 2017 to introduce the LMP Project to the community. Following the celebration, three LMP Public Meetings were held around the Winnebago System to engage area stakeholders in the planning process.

The LMP efforts are a dynamic process that requires a project structure which provides the necessary framework that will remain in place throughout the project. Below is an overview of the Winnebago System LMP Project Structure:

Winnebago Waterways Committee is comprised of the County Executive or County Administrator of each County, the County Board Chair from each County, and each County's Land and Water Conservation Committee Chair. This committee was created under the Intergovernmental Cooperation Agreement to oversee and administer the agreement and the funds designated annually by each county. Currently, the Winnebago Waterways Committee is made up of elected officials from Winnebago, Fond du Lac, and Calumet Counties who have committed funds to the project.

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Steering Committee is made up of nine voting members and several non-voting members and will drive the project through to completion. They recommend final project goals and objectives to the Winnebago Waterways Committee. The Steering Committee will initiate and plan for implementation of the LMP once complete.

Technical Teams consist of small groups of qualified conservation professionals. There were four Technical Teams formed in 2017 that consists of Aquatic Invasive Species & Aquatic Plant Management; Habitat, Fish, & Wildlife; Water Quality; and Recreational Lake Use, Access, & Navigation. In 2018, three more Technical Teams will be formed that will consist of Watershed Management, Shoreline Practices, and Outreach and Education. The objectives of the seven Technical Teams are to analyze key lake issues, develop projects goals, collect and analyze information, identify data gaps, recommend management objectives, and develop a list of possible management actions.

Focus Groups consist of 10-12 members of the public for each management topic and help ensure all groups are represented. They assist in developing evaluation criteria for reviewing management options. They provide input to develop project goals and prioritize the best management action recommendations.

Over the course of 2017, many major project goals were accomplished and the momentum will continue in 2018. The LMP is scheduled to be completed in 2019.

To learn more about the project please visit WinnebagoWaterways.org.



WINNEBAGO COUNTY STORMWATER PERMIT REVIEW RESULTS

By Andy Maracini, GIS Specialist & MS4 Permit Coordinator

Winnebago County is required to hold а Municipal Separate Storm System (MS4) Sewer Permit under NR 216. Wisconsin Administrative Code. The requirement is based on population density which is defined as those areas with а population greater than 1,000 per square mile. The area is defined as an Urbanized Area in the 2010 Census. In our case, this mainly relates to County road right of way (ROW), but also includes County owned facilities or other land that falls within the Urbanized Area. See Map 1 (on right).

Winnebago County has held a MS4 Permit since 2009 and the Highway Department is the official permit holder. The reason for this is that most of the areas that fall within the MS4 are County-owned ROWs. The Land and Water Conservation Department (LWCD) has assisted the Highway Department by managing the permit because of the expertise required to administer the permit requirements. Many municipalities choose to hire a private consultant to manage their permits. often at a high cost. We have saved County taxpayers significant funds by managing the permit "inhouse" for most permit requirements.

The permit conditions are summarized by the following 9 components:

- 1. Public Education & Outreach
- 2. Public Involvement and Participation
- 3. Illicit Discharge Detection and Elimination
- 4. Construction Site Pollutant Control
- 5. Post Construction Stormwater Management
- 6. Pollution Prevention
- 7. Stormwater Quality Management
- 8. Storm Sewer Mapping
- 9. Annual Report

Within each of these components are numerous

standards and requirements that must be satisfied and then reported upon within the Annual Report that is submitted to the Wisconsin Department of Natural Resources (WDNR).

MS4 PERMIT REVIEW

Early in 2017, Winnebago County was randomly selected for review by the WDNR. It should be noted that all prior submissions of the Annual Report 2009-2016 had been approved with no comment by the WDNR. The purpose of the review is to evaluate the



practices, processes, and effectiveness of the work being done to satisfy permit conditions. The evaluation is a rigorous review that involves two days of meetings that is divided between 1 day of office interviews and 1 day of field inspections. Upon completion of the evaluation, a summary of findings and recommended actions are developed by the WDNR and submitted to the permit holder. Prior to the on-site visit, the WDNR requests information regarding the MS4 program. This "data-call" is an intensive process that requires a significant amount of information to be gathered ranging from maps to erosion control permits.

During the "data-call" portion of the process, the WDNR requested that several other departments join the evaluation. When the permit was first acquired in 2009, Erosion Control Permits were handled by the LWCD. In 2012, that responsibility moved to Planning and Zoning (P&Z). Therefore, the P&Z Department was to be invited, as was the Highway Department, Facilities Department, and Parks Department. This represented a significant expansion of scope and responsibility than had previously been required.

Under the direction of Tom Davies, Andy Maracini began coordinating the departments' data-call requests and began organizing formal and informal meetings in preparation for the

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upcoming on-site visit. We saw this as a unique opportunity to take advantage of direct WDNR input and make significant changes to the existing MS4 Program. The most significant of the changes was the formation of an official MS4 Group. While there had always been communication between departments, regular meetings were neither required nor scheduled. Based upon the newly communicated permit requirements involving both the Parks Department and Facilities Department, it was clear that more regular and formalized meetings would be needed. Oftentimes, change can be difficult in any organization and evaluations of any sort can be stressful. The County's various departments instead worked positively and were enthusiastically engaged in

working towards the new requirements set in front of the group.

RESULTS & PROGRESS

The results of the review included several high priority findings that were required to be made, as well as numerous other suggested improvements that could be made. In the end, the County was found Non-Compliant be to primarily because of a lack of having an approved Illicit Discharge and Detection Ordinance and an updated Erosion Control Ordinance. In order to again regain compliance the County needs to satisfy all of the required actions and show progress in other areas. In order to meet the requirements the MS4 Group met regularly and the LWCD developed a compliance plan and schedule that was submitted and accepted

by the WDNR.

To date, the County has successfully implemented an Illicit Detection and Elimination Ordinance, (see Chapter 14 of the County Code), and an approved update to the Erosion Control and Post Construction Site Ordinance. Other significant accomplishments include:

- Created a Stormwater Pollution Prevention Plan for the Highway Department Facility,
- Developed a Nutrient Management Plan for the Parks Department,
- Provided training and education to County Staff,
- Secured a WDNR Grant Award to update Stormwater Quality Modeling.

SUMMARY

Based on the positive work of all departments and staff involved, the County is well positioned to complete the aggressive compliance schedule that was put in place. We expect to satisfy all permit requirements to move the County into permit compliance. The newly created MS4 Group continues to meet on a quarterly basis and is looking forward to additional improvements planned for the MS4 Program. These improvements will primarily be focused on an update to Stormwater Modeling and incorporating new monitoring technology such based as web data collection and mapping. In closing, we would like to thank all departments involved as well as the review and input provided by the oversight committees: Land Conservation Committee. Highway, and Planning & Without Zoning. their dedication and hard work we could not have achieved our goals.



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2017 FARMLAND PRESERVATION PROGRAM ANNUAL REPORT

By Sheila Smith, Agronomist

The Wisconsin Farmland Preservation Program (FPP) provides income tax credit to Wisconsin farmers in exchange for keeping land in agricultural use and maintaining compliance with the State Agricultural Performance Standards (NR151).

County wide, 75 landowners were certified in the FPP for the 2016 tax year. Additionally in 2016, 12,287 acres were certified which generated \$92,153 in tax credits for those Winnebago County participants.

The Winnebago County Land and Water Conservation Department (LWCD) continues to assist participants in maintaining compliance with the State Ag-Performance Standards. Starting in the 2016 tax year, all Certificates of Compliance had to have a mandatory Department of Revenue (DOR) approved number. Participants in the FPP are required have this DOR number on their Certificate of Compliance which they receive at their Annual Certification appointment.

WINNEBAGO COUNTY LWCD, NRCS AND FSA ADMINISTER \$1,341,166 IN CONSERVATION PROGRAM FUNDING

By Tom Davies, Director

In 2017, the Winnebago County Land and Water Conservation Department (LWCD) was awarded \$221,299 in state grant funding. This funding was used to cost-share projects practices for and landowners and offset departmental expenses. In addition, the LWCD budgeted \$85,000 of costshare funds provided to county constituents through the Winnebago Water Quality County Improvement Program. The LWCD also carried over \$193,768 of state and local contracted cost-share funds from 2016 to be utilized in 2017.

United States The Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) provided \$115.547 for the installation of Best Management Practices (BMPs) contracted through the Environmental Quality Incentives Program (EQIP) \$368,753 and in incentives to producers/ landowners for current and new conservation minded farming practices through Conservation the

Stewardship Program (CSP).

The USDA Farm Service Agency (FSA) provided \$289,222 in annual for 214 payments Conservation Reserve Program (CRP) contracts that totaled 3,791 acres of enrolled land and \$67.577 in annual payments for 96 Conservation Reserve Enhancement Program (CREP) contracts that totaled 641 acres of enrolled land.

These conservation program funds, totaling \$1,341,166 were utilized to cost-share and support the installation of BMPs and reward conservation minded land practices throughout Winnebago County. Grant and program funds such as these provide a significant and positive economic impact for our local producers/ landowners. contractors and related businesses.

FSA also issued \$3,352,786 in agricultural commodity price support payments to Winnebago County producers.

WINNEBAGO COUNTY LAND AND WATER CONSERVATION DEPARTMENT INTRODUCES "THE SOIL HEALTH CHALLENGE" A SOIL HEALTH DEMONSTRATION PROGRAM

By Tom Davies, Director

📕 n March 2017, after months of meetings. research, and planning, the Land and Water Conservation Department (LWCD) kicked off a new and exciting program called "The Soil Health Challenge (SHC)". The Winnebago County SHC is a program designed to reward participants that are willing to work with the LWCD and commit a portion of their cropland to no-till farming,

coupled with well managed cover crops, in an effort to educate themselves and other producers on the many benefits of improved soil health.

Participants of the SHC will be required to meet the program requirements in order to receive incentive payments. The payments increase incrementally each year during the six year agreement (starting \$60 - ending \$150/acre). Participants will also be asked to open their field(s) for public viewing at certain times of the year and open their minds to a new and exciting shift in the way they manage cropland.

Participants are selected from the pool of applicants by the LWCD based on location, soil types, cropping program, and willingness to join the LWCD in a long-term commitment to learn about and promote soil health in Winnebago County. Each participant's field(s) will be identified with signage to communicate its purpose and to recognize the landowner's commitment to soil health and water quality improvement.

In the fall of 2017, two enrolled landowners demonstration fields in the program and will begin working with the LWCD to share their learning process with the agricultural community and other interested citizens in Winnebago County.

"ON THE ROAD TO SOIL HEALTH"

By Tom Davies, Director

On the morning of August 16th, 2017, Walt, Patricia, and Eric Whiting hosted our annual Soil Health Field Day on the Munsil Williams family farm in Pickett, WI.

This year's program was titled *"On the Road to Soil Health"*. This thought provoking program generated interesting discussions on topics such as:

- No-till farming with cover crops and the inter-seeding of notill corn with cover crops
- · Herbicide and nitrogen planning with cover crops
- Soil compaction impacts on soil health
- Soil biological activity with cover crops
- Soil health demonstration pit and rainfall simulator

This program was provided by the Land and Water Conservation Department, UW-Extension, and Natural Resources Conservation Service in partnership with local agbusinesses to educate producers on the positive impact improved soil health can have on their productivity and the environment.

Our special thanks go out to the Whiting and Williams families for hosting and providing the site, to Lori Johnston-LaChey from Country Visions Coop, and to Rick Gehrke with Legacy Seeds for their participation and contributions. soil pit revealing the benefits of improved soil structure and increased water holding capacity in a no-till with cover crops system





cover crop that was seeded into six to eight inch standing corn

rainfall simulator in action, notice the difference in water clarity and infiltration with no-till and cover crops on left vs. conventional tillage and no cover crops on the right



WETLAND RESTORATION

By Mike Haase, Conservation Technician

his past year I designed and oversaw the installation of a wetland restoration system in the Northwest corner of the county. This system was a collaboration with the landowner, the Winnebago County Land and Water Conservation Department (LWCD), the Wisconsin Waterfowl Association, and the United States Fish and Wildlife Service. The landowner's goal on this site was to provide an opportunity to educate youth about wetlands and waterfowl as well as to create an opportunity for youth and wounded veterans to hunt waterfowl.

This project constructed 620 lineal feet of berm to back up water into 4 excavated scrapes that will create about 1.3 acres of open water. The material excavated for the scrapes was used to create the berms. The scrapes vary in depth from 0.5' to 4.5' creating a variety of edge habitat for ducks and other wildlife. The entire site will convert 3.6 acres out of agricultural production to create wildlife habitat. About 20 acres of neighboring cropland drains through this new wetland site which will act as a filter for the runoff. The water quality benefit from this site is an estimated removal of 30 tons of soil and 45 pounds of phosphorus each year from the water runoff.

Wetland restorations are incredibly effective conservation practices because of the multifunctional values they provide. They protect water quality by removing sediment and nutrients from runoff and providing habitat for a multitude of wildlife.



2017 INSTALLED BEST MANAGEMENT PRACTICES

By Chad Casper, Resource Conservationist

The Winnebago County Land and Water Conservation Department has several funding sources available to provide costsharing for the installation of eligible conservation projects. These funds help financially aid landowners with the installation of various eligible Best Management Practices (BMPs). Along with the funding assistance, our department provides surveying, engineering design, and construction supervision to ensure the projects are installed according to design specifications. Installing these BMPs will reduce the sediment and phosphorus loading to our local waterways. The BMPs will provide protection of water quality and groundwater resources throughout Winnebago County. The table below illustrates a summary of the structural BMPs designed and installed in 2017 with and without cost-sharing.

Best Management Practice (BMP)	Units Installed
Grassed Waterway	2,917 lin. ft.
Roof Runoff Structure	60 lin. ft.
Sediment Basin	1 ea.
Streambank/Shoreline Protection	122 ft.
Stream Crossing	4 ea.
Underground Outlet	1 ea.
Vegetated Treatment Area	.1 acres
Watering Facility	1 ea.
Well Decommissioning	23 ea.
Wetland Restoration	1.9 acres

Information and Education

By Melanie Leet, Conservation Technician

veryone depends on the environment around us for survival. It is vital that our community understands the importance of conserving and protecting natural resources for the quality and sustainability of life. Educating people of all about natural ages and resources the environment is a crucial component in addressing local environmental issues. Conservation/ environmental education combines knowledge of the issues we face today, education about what our department does and what citizens can do to prevent environment degradation from occurring, and how we can all work together to fix what has already taken Effective place. environmental education is a life-long learning process that leads to informed decisions and responsible actions which is why it is such an important piece of the puzzle of conservation.

One of the main Information & Education (I & E) efforts is to educate youth of the our communities. Our department works with the Winneconne Community School District to put together an educational event for fourth grade students every year at the Norbert Rich School Forest. By teaming together with the Department of Natural Resources and the Natural Resources Conservation Service, we present an educational event for students focusing on Forestry, Soils, Wildlife, and Water Quality. This hands on experience provides education to the youth concerning these vital areas of the environment, the problems that are occurring, and what is being done to correct these problems along with what the students can do to help protect the environment. Staff also presented to the students at Trinity Lutheran School in Oshkosh educating them about watersheds.

LWCD staff participated in various Career Days for Winneconne, Oshkosh, and the University of Wisconsin Oshkosh. These events expose students to different career paths so that they may focus their studies to their career goals. Our GIS Specialist, Andy Maracini, also participated in an annual Geographic Information Systems (GIS) Day at UW Fox Valley. The GIS Day offered a great opportunity for the students to learn about GIS technology. Andy demonstrated new web map capabilities as well as displayed several maps created specifically for the EAA Fly-in.

The LWCD setup staffed and unstaffed displays at various events. These displays allow us to provide information to the

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community that we might not normally interact with. We had displays at the various career days, the Winnebago County Fair, Bird Fest, and the WPS Farm Show.

LWCD worked with various groups including the Oshkosh Rotary Club, giving awareness to the importance of shoreline buffers and rain gardens. The Rotary Club also worked with LWCD staff in brainstorming for a storm sewer stenciling initiative. Employees also collaborated closely with the Friends of M e n o m i n e e P a r k Shoreland to promote shoreline restoration and buffer work.

LWCD staff also conducted two MS4 (Municipal Separate Storm Sewer System) training sessions this year. The training sessions are required as part of the MS4 Permit that Winnebago County holds. The purpose of the permit is to improve water quality by closely monitoring stormwater quality within

Winnebago County. The main focus of the training was to familiarize staff with what is required when an illicit discharge is detected. These trainings were conducted with the Highway Department and the Planning & Zoning Department since they both regularly oversee drainage issues and can help Winnebago County maintain high quality storm sewer conditions.

Beyond these I & E activities, the department participated in various other activities mentioned in different articles in this provided report. contributions to numerous newspaper articles, and participated on several steering teams and work groups. The LWCD continues to be receptive to new opportunities to present to the community and looks forward to being involved in many different I & E Activities in 2018.

NUTRIENT MANAGEMENT PLANNING

By Sheila Smith, Agronomist

armer training classes for nutrient management planning were held again this year. These classes give farmers a better understanding of the required steps to write Nutrient Management Plans (NMP) and provide basic knowledge about soil, nutrients, manure, and the growing of crops. One important topic that was covered this year was tolerable soil loss (T) value and how it affects their cost of production. According to the Wisconsin Department of Agriculture, Trade and Consumer Protection, one dump truck load of soil (about 16 tons) would cost approximately \$384 to purchase replacement topsoil. Plus you would need to add approximately

\$6.50 for lost nutrients per ton, or \$104 per dump truck load, and let's not forget the all-important Organic Matter (OM) which, according to lowa State University, would cost approximately \$6.00 per ton or \$96 per dump truck load. When added all together, it would cost \$584 to replace each dump truck load worth of soil that is lost from a field due to erosion. For example, on a 5.3 acre field with a "T" value of 3, the loss would be one dump truck load of soil each year. The economic value of soil loss from soil erosion needs to be coupled with the loss of long term soil productivity in order to truly understand the cost.

The total number of NMP acres for 2017 was 60,904, a 1% increase (1,611 acres) from 2016. In 2017 a new 677 acre farm was contracted to receive state funded cost-sharing to write a NMP for 2018. Currently, 56% of Winnebago County farmland has a NMP. This illustrates the priority the LWCD has placed on this practice and the impact of the State Agricultural Performance Standards on ag producers within Winnebago County.

TREE SALE

By Lynette Hein, Secretary

n 2017, 6,100 trees and shrubs were planted by landowners in Winnebago County, 900 trees were distributed to schools for handing out to students as part of their Arbor Day Program and 17.890 trees and shrubs were planted by landowners outside of Winnebago County, Where do the trees come from? Annually, the Winnebago County Land and Water Conservation Department (LWCD) distributes the trees and shrubs through the Wisconsin Department

of Natural Resources (WDNR) Tree Program. The trees mainly come from the WDNR's Wilson Nursery in Boscobel and arrive in mid to late April.

As part of the tree distribution day, the LWCD offers many materials and tools to landowners for ensuring the growth of a healthy tree. In 2017, the department sold 69 bags of root gel, 1,650 fertilizer tablets, and 327 4 ft. tree shelters. Another service the LWCD offers is the rental of tree planters. The planters are used mostly by landowners with large tree/ shrub amounts. In 2017, three landowners took advantage of our tree planter rental service and planted 4,400 trees. A "Tree Planting Workshop" held prior to tree delivery offers demonstrations on how to plant the trees with either a planter or by using a tree planting bar. All materials and equipment listed above are available year round for purchase and rental.

Landowners may purchase the trees and shrubs for installing riparian buffers, creating a wildlife enhancement area, or for

production. tree Often. landowners may purchase the trees as part of an incentive program which the may include Conservation Reserve Program (CRP),Conservation Reserve Enhancement Program (CREP), or Wisconsin's Managed Forest Law (MFL).

If you would like to take advantage of our tree distribution for 2019, please contact our office at the beginning of November-2018 for a 2019 Spring Tree and Shrub Application form.

Annual Poster Contest

By Lynette Hein, Secretary

We had a record year with <u>250 posters</u> collected for this year's Conservation Poster Contest held on December 7, 2017. The contest's theme this year was **"WATERSHEDS: OUR WATER, OUR HOME"** and was open to Kindergarten through 12th Grade students. This contest was created to promote environmental awareness in youth. The Winnebago County Land and Water Conservation Department (LWCD) would like to extend our "congratulations" and "thanks" to all the students who participated in this year's contest.

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2017 LAND ATLAS AND PLAT BOOK

By Andy Maracini, GIS Specialist

▲ he 2017 Land Atlas and Plat Book replaces the prior edition of the book which was published in 2012. The plat book features updated aerial photography from 2015 as well as any land ownership changes that occurred from the last

printing. The plat book was created completely in-house using ESRI GIS software and a variety of other standard desktop publishing software packages. The plat book may be purchased by visiting our office, the County Clerk's office, or by submitting an order request online at: <u>https://www.co.winnebago.wi.us/lwcd/rental-and-sales</u>. The cost is \$34.00 excluding tax and any shipping charges.

Visit us on the Web at: http://www.co.winnebago.wi.us/lwcd

LAND CONSERVATION COMMITTEE DIRECTORY

Chuck Farrey, Chair Tom Snider, Vice Chair Larry Kriescher, Secretary Steve Binder, County Board Member Bruce Bohn, Citizen Member Guy Hegg, County Board Member Roger Zentner, FSA Member

The Winnebago County Land Conservation Committee (LCC) is a standing committee of the Winnebago County Board. Working through the Winnebago County Land and Water Conservation Department, the LCC provides local leadership and establishes policies for the delivery of land and water resource management programs and services.

MISSION STATEMENT

Winnebago County Land and Water Conservation Department

Providing a full range of professional services in the planning, design, and performance of programs and projects that PROTECT, RESTORE, and SUSTAIN the natural resources of Winnebago County.

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