

Iron County Land & Water Conservation Department

2022 Annual Report



The Loon Project educates Hurley and Mercer School Students on water quality, invasive species, and healthy shorelines and how they can affect the loon population. Students learn about our lakes and how to be good stewards of our natural resources.



The mission of the Iron County Land Conservation Department is to provide leadership and promote sound land and water stewardship through education, technical support and consistent program delivery.

2022 Year in Review

Iron County Land & Water Conservation Department

Every year I report how impressed I am about the work this small department does, and then the following year, I am blown away again. The Land & Water Conservation Department continues to meet or exceed goals.

Zach Wilson, Conservation Specialist, led a summer staff of three this year. This crew really excelled in the management of invasive species. When looking at the numbers I can't believe they tackled 282 populations of invasive species both aquatic and terrestrial! That's in a period of about 3 months with a crew of 4 total, if that doesn't impress you, I don't know what will.

The Woods and Waters program with Hurley and Mercer Schools continues to educate youth on the importance of stewardship to maintain our high water quality standards and healthy forest ecosystems that Iron County has. Each year we find that more of our local students have never canoed or never been out on snowshoes! This program allows them to not only learn about science and ecology, but it gives them basic outdoor recreation opportunities that many don't get otherwise. Woods & Waters encourages those cell phones to be put away, so we can get outside and learn about why we live in this great county!

For more than 14 years, Iron County LWCD has been a major part of the WI Land+Water Conservation Camp for high school students from across the state. This camp exposes campers to various natural resource careers while getting them outdoors and having fun experiences. This year we were able to hold camp after canceling for the past two years. With a crew of 16 campers, down from the maximum amount of 25 kids, we were able to provide them with another great experience. Campers learned about the history of the WI Civilian Conservation Corps, met DNR Fish Crew while they were sampling Lake sturgeon, were able to see one up close, and visited Lake Superior, many for the first time.

Our popular cost-share program funded 2 township's stream crossing projects and assisted 1 private landowner with a shoreland stabilization project. The cost of these conservation projects has skyrocketed along with the price of eggs. Unfortunately, our cost-share pot of money has not followed that trend. In addition to the 3 projects, we were able to fund, we also designed an additional 3 shoreland stabilization projects, 2 of which were installed by the landowners this year, and one stream crossing project for a town that was not installed due to the cost and enormity of the project scope. I also assisted the Zoning Department on 5 different shoreline mitigation projects.

This year this department accomplished a lot, but we would not be able to do much of this work without our wonderful volunteers! We work with 31 different volunteers who collect water quality data, we work with countless volunteers who have pulled Curly leaf pondweed, monitored Purple loosestrife populations, and so much more. While we get paid, the volunteers do this hard work for the love of their lake or favorite stream! They are the TRUE conservationists! THANK YOU for all your hard work!

Sincerely dedicated to conservation,
Heather Palmquist
County Conservationist/ Department Head

Iron County Land & Water Conservation

The mission of the Iron County Land & Water Conservation Department is to provide leadership and promote sound land and water stewardship through education, technical support, and consistent program delivery.

<u>LCC Committee</u>		<u>LCC Staff & Support</u>	
Roy Haeger	Chairman	Heather Palmquist	Conservationist/Dept Head
Karl Krall	Vice-Chairman	Zach Wilson	Conservation Specialist
William Thomas		Matthew Bolen	Wildlife Damage
Dale Wehmas*	Citizen Representative	<u>Natural Resource Conservation Service</u>	
		Vacant	District Conservationist
		Todd Norwood	Civil Engineering Tech.

* Denotes Non-County Board Member

Land Conservation Committees were created under Chapter 92.06(1)(a), Wis. Stats. and have local responsibility for natural resource issues related to erosion control, sedimentation and nonpoint source pollution, and other duties as directed by the county board.

Administrative Activities

- Administered **\$128,565** in DATCP staff and support funding for the department in 2022.
- Administered **\$76,305** of DATCP conservation project cost-share funding.
- Administered **\$28,721** in funds for the Wildlife Damage Program.
- Coordinated the Native plant sale including **\$9,478** in sales.
- Administered a **\$16,268** DNR Surface Water LMPN Grant.
- Developed & administered the department's budget.
- Filed all reimbursement requests and grant reports.
- Served on Youth Education Committee.
- Served on Great Lakes Committee.
- Served as the NW Land & Water Conservation Association Coordinator.
- Served on the Area Interagency Training Committee (AITCOM).
- Assisted in coordinating Shoreland Stabilization Tour to train technicians on techniques and toured 2 Iron County projects.
- Attended the WI Land+Water Conservation Association annual conference.
- Attended County Conservationist meetings.
- Provide conservation technical planning for 3 townships & 3 private landowner designs.
- Projects designed totaled **\$252,580** for the year.
- Attended Wisconsin Lakes Convention.
- Secured \$400,000 in grant funding for Town of Kimball - Kaari Creek Watershed Project for 2023.
- Completed 10 past project checks.
- Supervised staff.

Budget Summary *(includes actual expenses & approximate revenues)*

	2022	2021	2020	2019	2018
DATCP Salary Grant	\$128,565	\$111,729	\$108,529	\$102,925	\$97,960
DATCP Cost-Share	\$46,642	\$76,305	\$55,215	\$49,509	\$68,883
Wildlife Damage	\$28,721	\$20,688	\$18,528	\$13,530	\$12,836
Native Plant Sale	\$9,478	\$3,472	\$4,886	\$6,172	\$4,467
Marten Project	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Natural Resource Found.	----	----	\$5,000	\$4,875	----
U.S. Fish & Wildlife	----	----	\$30,500	----	----
DNR AIS Grant & Xcel	\$25,087	\$24,597	\$8,232	\$8,071	\$7,938
DNR Lake Grants/Misc.	----	\$27,557	----	----	\$25,000
FPP/Coastal Management	----	----	----	\$12,995	----
Montreal River Project	----	----	----	\$5,000	\$5,000
Other	\$7,001	\$2,641	\$3,140	\$4,516	\$6,210
TOTAL Revenue:	\$253,494	\$274,987	\$242,030	\$215,593	\$236,294
Dept Expenses:	\$272,062	\$325,796	\$269,543	\$260,098	\$253,177
County Cost:	\$18,568	\$50,809	\$27,513	\$44,505	\$16,883

The County Cost line in this chart shows the total amount the county contributed to the department's budget.

*****In 2022, the county's cost was approximately 7% of the total LWCD's operating budget.**

Water Resource Management (LWRM) Plan

Chapter 92 of the Wisconsin Statutes grants authority to Land Conservation Committees (LCC) to set policies for local soil & water resource management. Their policies are administered through the LWCD.

The purpose of the Land & Water Resource Management Plans is for the counties to assess their individual resources, concerns, and plans for addressing concerns. These plans are approved for a 10-year period, with a review 5 years into the plan. These mandatory plans are reviewed by the WI Land & Water Board in order for counties to receive their funding from DATCP.

Implementation of the plan is driven by the annual work plan, which includes goals, and activities identified by the LCC and the public.

Agricultural practices, streambank stabilization, riparian habitat restoration, and technical assistance to Towns continue to drive the conservation practice workload of the department. In 2022, we fielded more than 39 site visits and numerous responses to technical requests.

The LWCD works cooperatively with agencies and county departments as opportunities arise including the Forestry, Highway, and Zoning Departments. The department is committed to a strong partnership with youth and adults through lake groups, Hurley & Mercer Schools, Fe University, and more.

The table below summarizes the projects funded in 2022 through the Cost-Share Program.

Completed LWRM Cost Share Projects – 2022 (pictures start on page 5)						
Project Type	Name	Total Cost	DATCP CS \$	Other \$	Source	Landowner
Stream Crossing - 2021 C/O	Town of Anderson	\$36,611.00	\$18,305.50	\$9,152.75	County 25%	\$9,152.75
Stream Crossing	Town of Sherman	\$7,054.00	\$3,527.00	\$1,763.50	County 25%	\$1,763.50
Shoreline Stabilization	Melink – Trude Lake	\$19,460.00	\$9,730.00	NA	NA	\$9,730.00
TOTAL:		\$63,125.00	\$31,562.50	\$10,916.25		\$20,646.25

2021 DATCP Funded Conservation Practices



This culvert was undersized and kept washing out. With every big rain event, the road would wash out depositing gravel into the stream. This stream is a tributary to Tyler Forks.

Stream Crossing Town of Anderson – Caroline Lk Rd (2021 Carryover Money)

DATCP CS:	\$18,305.50
County Share:	\$9,152.75
Landowner:	\$9,152.75
Total:	\$36,611.00



Stream Crossing Town of Sherman – Springstead Lk Rd



This culvert was too short causing erosion of the road edges in high water. In addition, we removed concrete slabs that lined the stream edge on the outlet, many had failed, blocking water flow, we removed what we could from the road edge.



DATCP CS:	\$3,527.00
County Share:	\$1,763.50
Landowner:	\$1,763.50
Total:	\$7,054.00

2022 DATCP Funded Conservation Practices (cont.)

Shoreline Stabilization Melink – Trude Lake

DATCP CS:	\$9,730.00
Landowner:	\$9,730.00
Total:	\$19,460.00



This property had an old cedar post retaining wall from over 40 years ago, the wall was failing with major erosion occurring behind the failing wall. Here we removed the old retaining wall, installed rock riprap, and a ShearForce mat at their viewing and access corridor to protect their highly erodible access. In 2023, we will follow up with a shoreline restoration planting.

Shoreland Mitigation Plans – developed for landowners



Weber Lake Violation, property owner cleared the entire lot. This property has a very steep grade to the lake.



Lake of the Falls violation, property owner graded within the shoreland buffer and below the OHWM.

Land & Water Resource Management (LWRM) Plan

Promoting land and water conservation outreach is the number one priority of Iron County's LWCD. The department dedicates a vast amount of time, energy, and funding to promote stewardship and resource protection to students, farmers, municipalities, elected officials, landowners, and the general public. This is the only department in the county that fills the niche.

Iron County participates in the state and regional Conservation Poster & Speaking Contest sponsored through the WI Land & Water Conservation Association. The 2022 theme was "Healthy Soils Healthy Life" There were 36 participants from Mercer's Art, Science, and English classes. The elementary division speech winner from Mercer moved on to the regional speech competition along with the winning posters. Mercer's 5th Grade student Hunter Saarnio received 1st place at the NW Area (regional) speaking contest and moved on to the state competition held on March 2, 2022. The contest was held virtually with the speeches submitted through video.



Mercer Students -Conservation Speech and Poster Competition

Wisconsin Conservation Camp

After canceling for the past two years due to Covid, we were finally able to resume conservation camp. June 20-23, 2022 16 kids participated in WI Land+Water Conservation Camp for high school students. One of which was an Iron County resident who received a scholarship from our Native Plant Sale proceeds. Campers were able to experience Lake Superior (many for the first time), view waterfalls, assist with Sturgeon netting and tagging on the Turtle Flambeau Flowage with DNR Fisheries Staff, learn outdoor skills, and tour the CCC Camp in Mercer.



Campers assisted in pit tagging a sturgeon on the Turtle Flambeau Flowage.



Historian Jim Bokern educates campers on the CCC camp in Mercer, WI.

Land & Water Resource Management (LWRM) Plan (cont.)

Total Outreach & Education:

Field days, workshops, education programs: 96 programs

Student & adult program attendees: 854 youth and 695 adults

Native Plant Sale brochures distributed: 400

Total Participants: 836

Misc. Education Activities - (number of events); # participants

- **Woods & Water (55); 52 students**
- **School programs (59); 854 students**
- **Lake Association talks (12); 223 participants**
- **AIS education programs (21); 449 attendees**
- **Terrestrial Invasive (6); 21 participants**
- **Conservation poster contest; 19 students**
- **Conservation speaking contest; 13 students**



Curly leaf pondweed hand pulling event-Turtle River, Rice and Pike Lakes.



Hurley 7th grade students once again helped pull garlic mustard at a private landowner's property along the Montreal River.

Invasive Species Program

Iron County's Aquatic Invasive Species (AIS) program is strong and successful and is now in its 15th year. The program has proven to be essential, educating the public, providing resources, and helping fight invasives throughout Iron County. This year we hired 3 summer interns/LTE, through the Xcel FERC licensing agreement, and the DNR - Lake Monitoring and Protection Network grant. The positions were designed as conservation field technicians to work alongside the Conservation Specialist. Together, the crew conducted surveys, created education fliers, controlled and managed both aquatic and terrestrial invasive species, and conducted the Clean Boats Clean Waters watercraft inspections program.

In addition, the LTE's had independent study projects that helped the department improve education and outreach. Through this, they created a newsletter, developed educational flyers, and worked on additional invasive species projects. Additional AIS monitoring surveys were done on the following lakes: (9 lakes) Turtle Flambeau and Gile Flowage, Lake of the Falls and Pike Lake, Spiny water flea and Zebra mussel tows for Grand Portage, Echo, Pine, Island, and Fisher Lakes.

Purple loosestrife continues to be a focus on the Turtle Flambeau Flowage. Each year a large workday is organized with volunteers from the lake association, WDNR, and LWCD staff. Based on data collected through the last 9 years, populations of this invasive plant seem to be somewhat under control, but not eradicated. Continued monitoring and management are advised.



Turtle Flambeau Flowage Purple Loosestrife Workday-WDNR, TFFTL-Assoc. & Iron County Land and Water Conservation Dept.

Education Accomplishments

- Assisted Pike & Rice Lake to help fulfill activities highlighted in the Early Detection and Response grant.
- Trained & organized volunteers to hand pull invasives on the Turtle River, Pike, Rice, and Spider Lakes.
- Conducted educational trainings, lessons, workshops, and field trips.
- Increased online presence through educational pamphlets and flyers.
- Attended and hosted large educational events: Earth Day, Loon Days, Conservation on Tap, and the Turtle River Watershed forum; with a total of 383 participants.

Technical Assistance / Management/ Monitoring

- Treatment of Japanese knotweed, Purple loosestrife, Wild parsnip, Giant hogweed, Garlic mustard, European marsh thistle, Yellow iris & Curly leaf pondweed
- Maintained partnerships with WDNR, NCWMA, GLIFWC, USFS, and National Park Service.
- Coordinate water quality monitoring volunteers on 31 lakes in Iron County

Woods & Waters Project

Since 1999, Hurley and Mercer students have gained first-hand experience in conducting field research by studying the link between Iron County Forest types, soils, wildlife, and water quality through the Woods & Waters Project. This unique program draws students into the field to study water quality and loons during summer and to study the American marten and the Iron County Forest in the fall/winter.

In April and May, Hurley and Mercer students participated in the Loon Project. In total, 18 students assisted in placing nesting platforms on the Gile Flowage, Deer, and Fox Lakes. These students learned how to test for water quality, learned about loon ecology, and how shoreline development can impact water quality and loon reproduction.

During the fall of 2022, we started the project off with an introduction to the county forest. Students met Eric Peterson (County Forest Supervisor) at Corrigan's Lookout, where they learned about George A. Corrigan and the county forest. Students also ventured into the forest and out to Saxon Harbor where they learned about Lake Superior and the many opportunities for recreation the county forest offers. Throughout the rest of the year, students learned about forest ecology from soils to forest cover types. Students in Hurley even participated in the Wisconsin Trapper Education program, where they went through an intense month-long course, learning about conservation and trapping. The remainder of the year focused on identifying trees and cruising timber for forest management assessments. Students learned about the three ecological landscapes in Iron County, how to conduct tracking surveys, age deer, and survey with game cameras to monitor American marten populations. Lessons occurred each week from October through March.



Students learn about macro-invertebrates while studying lake health.



Students learn about cell biology while looking at leaves and trees.



Hurley and Mercer Students learn about the County Forest from high up on Corrigan's Lookout.



Native Plant Sale



The 2022 Native Plant Sale was successful once again. This sale provides an opportunity for landowners to purchase small quantities of native seedlings, grasses, and wildflowers at a low cost. All the plants in the sale are native to northern Wisconsin!

There are many environmental and social values in promoting native species. This supports local nurseries and ensures greater survival because the plants are adapted to northern Wisconsin's climate. Once established, they require less maintenance because they do not need water, fertilizer, or pesticides.

Multiple layers of native plants (groundcovers, shrubs, and trees) provide the essential food, shelter, and space for a diversity of wildlife. These plants have broad and often deep roots, thus reducing soil erosion and promoting water percolation into the soil. As water percolates into the ground, nutrients are absorbed that would otherwise run off into nearby lakes or streams.

Benefits and uses of these seedlings include wildlife value, timber, windbreaks, shoreland habitat restoration, and more.

Proceeds from the Native Plant Sale funded scholarships for Iron County students to attend Youth Conservation Camps, conservation education for teachers, and community conservation projects.

2022 Native Plant Sale:

- ❖ 775 trees & shrubs
- ❖ 69 ferns
- ❖ 1,504 grasses/wildflowers

❖ **2,348** Total Plants Distributed

- ❖ Sent 1 Iron County student to the High School Conservation camp.

2021 Native Plant Sale:

- ❖ 1,090 trees & shrubs
- ❖ 11 ferns
- ❖ 671 grasses/wildflowers

❖ **1,772** Total Plants Distributed

- ❖ Camps cancelled in 2021.

Wildlife Damage Abatement Program

The Wildlife Damage Abatement & Claims Program (WDACP) was created by the Wisconsin Legislature in 1983 and has been implemented in Ashland, Bayfield, Douglas, and Iron Counties since 1987. Iron County's program is administered out of the Ashland County LWCD office.

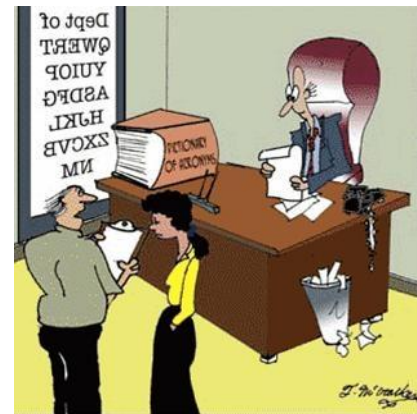
The emphasis of the WDACP is on abatement (alleviation) of damage from deer, bear, turkey, and geese through techniques such as modification of agricultural practices, fencing, live trapping and relocation of bear, repellents, scare devices, and wildlife population control through managed hunting. In the 4-county area, there are a variety of commercial crops being damaged by wildlife including corn, sunflowers, soybeans, buckwheat, forage, apples, cherries, plums, strawberries, blueberries; carrots, beets, beans, and other garden vegetables, cut flowers, honey, and livestock.

ABATEMENT: The wildlife damage program responds to dozens of program inquiries and damage complaints annually. For those people that meet program eligibility requirements, some choose to enroll and implement abatement measures when damage is first reported.

CLAIMS: Matt Bolen, the WDACP Specialist, started managing the claims program in 2022. Program participants must call for damage appraisals at least 10 days prior to harvest to remain eligible for damage reimbursements. They must comply with program requirements and have properly implemented the recommended abatement measures to have their claims approved by the Land Conservation Committees and the WDNR. Iron County had one bear trapping and relocation program participant in 2022, in which, 36 bear were trapped and relocated. In addition, there were 9 additional bears listed as harvested. The 936.8 acres appraised had a determined loss of 88.9 bushels of corn.

List of Acronyms

APHIS	Animal & Plant Health Inspection Service (part of USDA)
BMP	Best Management Practice
CSA	Cost Share Agreement
DATCP	Wisconsin Department of Agriculture, Trade, and Consumer Protection
FPP	Farmland Preservation Plan
FSA	Farm Service Agency
GIS	Geographical Information System
GLIFWC	Great Lakes Indian Fish & Wildlife Service
LCC	Land Conservation Committee
LWCB	Land & Water Conservation Board
LWCD	Land & Water Conservation Department
LWRM	Land & Water Resource Management
NCWMA	Northwoods Cooperative Weed Management Area
NRCS	Natural Resource Conservation Service (part of USDA)
NWLWCA	Northwest Wisconsin Land & Water Conservation Association
SRWA	Superior Rivers Watershed Association
USFWS	United States Fish & Wildlife Service
USDA	United States Department of Agriculture
UWEX	University of Wisconsin Extension
WDACP	Wildlife Damage Abatement and Claims Program
WDNR	Wisconsin Department of Natural Resources
WI Land+Water	Wisconsin Land and Water Conservation Association



"It's time for McWit to leave.
He's learned all the acronyms we use."

Cooperating Agencies

This Department extends an appreciative Thank You for your contributions in our outstanding accomplishments and success in soil & water conservation.

Federal

United States Fish & Wildlife Service (USFWS)

- Ted Koehler, Wildlife Biologist

USDA Natural Resource Conservation Service (NRCS)

- Todd Norwood, Soil Conservation Technician

State

Department of Agriculture, Trade and Consumer Protection (DATCP)

- Kim Carlson, County Liaison
- Stacy Dehne, Engineer

Wisconsin Department of Natural Resources (DNR)

- Zach Lawson, Fisheries Biologist
- Jenna Malinowski, Wildlife Biologist
- Beth Feind, TFF Property Manager
- Nichole Hays, Water Management Specialist
- Jon Simonsen, DOT Liaison

Superior Rivers Watershed Association

- Kevin Brewster, Program Manager

County

Iron County Board & Board Chairman

Iron County Forestry Department

- Eric Peterson, County Forestry Administrator

Iron County Zoning Department

- Erika Roeder, Zoning Administrator

Iron County Highway Department

- Mike Swartz, Highway Administrator