State of Wisconsin
Land and Water Conservation Board

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Advisory Committee on Research
Agenda

November 4, 2025

The Advisory Committee on Research (Committee) to the Land and Water Conservation Board (LWCB) will meet on November 4, 2025 at 9:00 am via Microsoft Teams. To attend the meeting, use the following hyperlink to register to the Teams meeting and receive the access link. The agenda for the meeting is shown below.

AGENDA ITEMS AND TENTATIVE SCHEDULE:

9:00 AM	1	Meeting Called to Order – **Ron Grasshoff, Committee Chair** a. Roll Call b. Open meeting notice c. Approval of meeting agenda d. Approval of September 2, 2025 meeting minutes
9:10 AM	2	Review and Discussion of LWCB Educational Presentations Survey **Kirsten Biefeld, DATCP**
9:35 AM	3	Discussion of Potential Topics and Goals for 2026 LWCB Educational Presentations **Ron Grasshoff, Chair**
10:10 AM	4	Member updates with possible discussion
10:25 AM	5	Planning for the next Advisory Committee Meeting - **Ron Grasshoff, LWCB**
10:30 AM	6	Adjourn

LAND AND WATER CONSERVATION BOARD
ADVISORY COMMITTEE ON RESEARCH
MEETING MINUTES

September 2, 2025
Microsoft Teams Meeting

Item #1 Call to Order – Roll call, open meeting notice, approval of agenda, approval of September 2, 2025 Committee meeting minutes.

Call to Order

The Advisory Committee on Research ("Committee") to the Land and Water Conservation Board ("LWCB" or "Board") met via videoconference on September 2, 2025. The meeting was preceded by public notice as required by Wis. Stat. § 19.84. The meeting was called to order by Committee Chair Ron Grasshoff at **9:04 am**.

Committee Members Present

Members: Ron Grasshoff, Brian McGraw, and Monte Osterman. A quorum was present.

Committee Advisors Present

Advisors: Dr. Francisco Arriaga and Amber Radatz.

Approval of Agenda

Motion
Osterman motioned to approve the agenda as presented, seconded by McGraw, and the motion carried unanimously.

Approval of Minutes

Motion
McGraw motioned to approve the draft minutes of the May 6, 2025 meeting minutes as presented, seconded by Grasshoff, and the motion carried unanimously. The approved minutes shall be posted as the official meeting record for publication on the LWCB website.

Item #2 Public Appearances

Ron Schoepp, member of the River Alliance Board, SSWIG Producer Led Group and Lake Wisconsin Farmer Led Watershed Council, approached the board to discuss the potential need for further research on incentives of a state-wide cost-share program for farm equipment.

Schoepp attended the Dane County Supervisor Meeting at Siene Farm, August 21, 2025 in which the county's cost-share program for farm equipment was discussed and found it to be a valuable practice and should be implemented on a state-wide scale. Schoepp noted that Producer-led watershed groups have been a great program for connecting farmers and implementing conservation practices on farms. However, the producer-leg programs are limited to implementing practices, not helping to get no-till

equipment on farms. Producer-led programs engage a farmer and aid in implementing conservation practices for 3 years. However, producers may stop implementing conservation programs after the 3 years is over. If a cost-share program helped that farmer to own and use no-till equipment, Schoepp says that the farmer is much more likely to use that equipment and continue to implement conservation practices for the life of the equipment. Schoepp shared an email with more information that will be forwarded to the Committee.

Osterman asked Schoepp if the goal was to get as many no-till acres as possible or get equipment on peoples lands and hope they will use it, who responded in that it would achieve both goals. Osterman noted that some counties are already buying equipment and loaning or leasing no-till equipment for a reduced cost allows a producer a chance to experiment and test before buying equipment. Schoepp discussed that there may be a capacity issue for counties that only rent out equipment, that one a limited number of people can use it at a time. Having a no-till equipment cost-share program would get more equipment in the hands of producers and farming more land. Additionally, when people have it on their farm, they will continue to use it rather than trying it once only.

Item #3 Reflection on Previous Board Presentations

Ron Grasshoff, Chair, opened discussion for the LWCB presentations not covered since the May 6, 2025 Committee meeting.

- **Jeff Messmann's Wake Boating and the Environment, June 3, 2025 LWCB Meeting**

Jeff Messman provided an overview of how wakeboarding and similar water sports can harm local lakes by resuspending lakebed sediment can impact thermal layers in the water column and release nutrients. Additionally, ballast tanks can spread invasive species. Messmann noted there are many boat manufacturer lobbyists attempting to influence State legislators, making it difficult to pass legislation to for Wisconsin lakes. Messmann mentioned that local ordinances are currently being used to restrict and regulate wakeboarding as an alternative to Statewide regulation.

Dr. Francisco Arriaga shared that there was research coming from Minnesota (A Field Study of Recreational Powerboat Hydrodynamics and their Impacts on the Water Column and Lakebed by Riesgraf et al.) regarding detrimental findings of wakeboarding impact on lake beds and developed recommendations for the minimum standards powerboats should operate under, such as minimum depth of operation, for mitigating impacts to the lakebed and local ecosystem.

Grasshoff noted that while this is a hot button issue for local communities and water quality impacts, this topic may not be suitable for recommendations to UW System for research. A potential recommendation is for local communities to stay informed and share information between communities as it becomes available, such as the research paper mentioned above. Dr Arriaga made a the point that recreational activity can and does have an adverse impact on Land and Water Resources and perhaps the Land and Water Conservation movement should stay engaged in the issue.

- **DNR Joe Bennell's Update on Nutrient Loss Reduction Strategy, August 5, 2025 LWCB Meeting**

Bennell provided an overview of the current nutrient loss reduction strategy, which is an updated version from the original 2013 strategy effort.

Radatz discussed the benefits and drawbacks of the strategy and that the strategy is intended to address Gulf Hypoxia or the "Dead Zone" in the Gulf of Mexico. Previously, a 2013 nutrient loss reduction strategy was described as inadequate because there was no vision and no stakeholder engagement. Radatz discussed that there is no a set of standards for nutrient loss reduction at this point in time. It is, however, a strategy or process that uses data from agricultural best management practices from both agricultural research centers in Wisconsin and other midwestern states to inform decision making. Radatz also discussed the value the strategy can have on education and outreach implementation for UW Extension, as well as evidence to justify research needs for the UW System such as for grant applications, or similarly for counties who need to provide reasoning for implementing new best management practices. Overall, Radatz discussed that while the strategy is not a means for regulation, it is a guide to inform future decision making and could lead to numerical standards to reduce nutrient loss from agriculture to the environment

The Board may be able to provide input on what this strategy should additionally address.

- **Dr. Evan Larson's Tree-ring Perspectives on the Long-Term dynamics of Water Resources in Wisconsin, August 5, 2025 LWCB Meeting**

Dr. Evan Larson presented on current research regarding the study of historic use of fire as a land management tool by indigenous people. One of his research projects focused on a Red Pine Stand along a dune system (Wisconsin Point) in the City of Superior. By using dendrochronology, he affirmed a fire history dating long before European colonization. His work also documents climate trends in the past few centuries. He argues that exclusion of fire in forest management has reduced ecosystem resiliency. Through tree ring analysis in the Driftless area, Dr. Larson identified an extensive Oak Savanah dominated ecosystem that was shaped by fire. Dr. Larson's work is attempting to paint a picture for what the landscape looked like prior to colonization, and what traditional practices such as fire can be used today to better manage these ecosystems. Grasshoff mentioned that his work is supported by a Grant from Sea Grant it is described in the Aquatic Science Chronical.

Item #4 Workplan Review and Discuss Engagement Strategy for Future Presentations

Ron Grasshoff, Chair, opened discussion regarding the Committee's workplan and education engagement for the Board. Currently planned presentations include:

- October, 2025 LWCB meeting: WI Land & Water and DNR's Climate Change and LWRM Plans
- December, 2025 LWCB Meeting: Dani Heisler's Introduction to PWLWP Grant Program

Osterman brought up the idea that instead of waiting till the next meeting after a presentation has appeared before the board to discuss what we have learned, that the Committee would vet presenters and critique the potential presentation to determine how relevant the presentation is to our goals and whether the presentation should go before the board. This may be a tactic moving forward once the Committee has identified initial topic/research focuses for recommendations to the LWCB.

Item #5 Member Updates with Possible Discussion

- Osterman noted that he had attended the Milwaukee Annual Meeting of the National Association of Conservation Districts in July, 2025 and agreed to summarize the meeting at the next Committee meeting.

Item #6 Planning for the next Advisory Committee meeting

The Committee should expect the following at the November 4, 2025 meeting:

- Review and discussion of educational opportunities of the past year in order to narrow topic focus for the Committee to develop recommendations on research gaps to the UW System and other stakeholders.
- Update regarding potential survey to the Board for member reactions to the 2025 educational presentations supported by the Committee.

Item #7 Adjourn

Motion

Grasshoff motioned to adjourn, seconded by McGraw, and the motion carried unanimously. The meeting was adjourned at 10:25.

Respectfully submitted by,

Kirsten Biefeld, Bureau of Land and Water Resources
Division of Agricultural Resource Management
WI Department of Agriculture, Trade and Consumer Protection

Presenter Name	Association	Presentation Date	Presentation Title	Presentation Topics
Chelsea Zegler	(Previously) UW-Madison, Division of Extension, Ag Water Quality	10/1/2024	The Zone of Interaction: Assessing Water Quality Risk Through Soil Sampling - A Participatory Reseearch Project	Producer-leg groups, participatory research, Phosphorus Water Quality Risks
Ben Becker	Wisconsin's Greenfire	2/4/2025	Farm Sustainability Rewards (FSR) Project	Overview of FSR, how it incentivizes producers to use nutrient management plans and implement conservation practices and achieve long-term soil and water conservation goals.
Jeff Hadachek	UW-Madison, Ag and Applied Economics Department	4/1/2025	Balancing On-farm Economic Incentives with Water Quality Benefits	I plan to spend most of my time discussing my research evaluating the cost-effectiveness of the Producer Led Watershed Program at improving water quality and increasing conservation practices. Then, I will spend the remainder of the time discussing how Wisconsin state level programs fit into and can inform broader agricultural-environmental policy.
Jeff Meessmann	Last Wilderness Alliance	6/3/2025	Wakeboarding Issues	wakeboarding and similar water sports can harm local lakes through lake bed settlement disruption, which can additionally impacts thermal layers in water and can release nutrients into water column. Additionally, ballis tanks can spread invasive species. There are many boat manufacturer lobbysts in state legislature that makes it difficult to pass restrictions, presenter put an emphasis on local legislation
Dr. Evan Larson	UW Stevens Point	8/5/2025	Tree-ring Perspectives on Wisconsin Water Resources	Dr. Evan Larson presented on current research regarding the study of historic impacts on fire and recreation of precious climate trends in the past few centuries in sustaining red pine forests using dendrochronology. His research setting has a main focus on the City of Superior, but extends throughout the state on different ecosystems like oak savannahs, northern forests, trying to paint a picture for what the landscape looked like prior to colonization, and what traditional practices such as fire can be used today to better manage these ecosystems.
Joe Bonnell	DNR	8/5/2025	Update on Nutrient Loss Reduction Strategy	Overview of current nutrient loss reduction strategy
Helena Tiedmann (DNR) and Jenny Pethan (WI Land+Water)	DNR and WI Land+Water	10/7/2025	Planning for a Healthy & Resilient Future: Incorporating Climate and Protection into County Land & Water Planning	DNR started to include climate resilience and watershed protection into water quality programmatic work done by DNR and their partners. DNR is working with WI L+W to develop tools to make climate resiliency research and management plans tailored to individual counties, which has taken the form of tthe Climate Resilience Toolkit.

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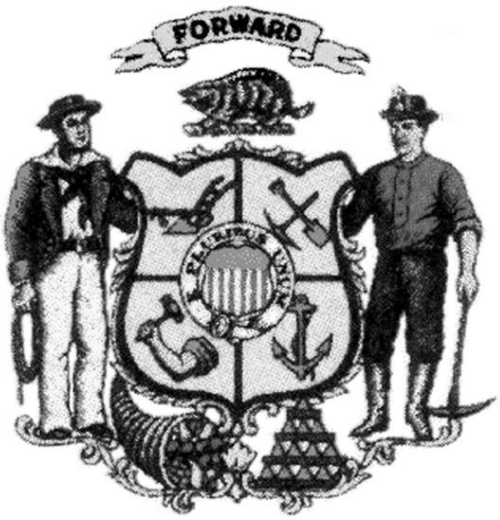

2023

Soil & Water Conservation Research and Educational Needs Survey Report

Prepared by

LWCB Advisory Committee on Research

&

Zach Zopp
Bureau of Land and Water Resources
Wisconsin Department of Agriculture, Trade and Consumer Protection

Approved on June 6, 2023

Wisconsin Department of Agriculture, Trade and Consumer Protection
P.O. Box 8911
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PREFACE

LAND ACKNOWLEDGEMENT

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has the privilege and responsibility to acknowledge the Indigenous people who have called this land home for generations. This acknowledgement demonstrates our strong commitment to collaborate and partner with the sovereign Tribal nations located in Wisconsin. There are now 12 Tribal nations that call this land home, 11 of which are federally recognized. No matter where you are in the state, you are on the ancestral land of a Tribal nation. The Department reminds each of us to take the opportunity to learn about and appreciate the history of the land we are on and the great historical, present, and future contributions of Indigenous people.

- DATCP. *Land Acknowledgment*. https://datcp.wi.gov/Pages/About_Us/LandAcknowledgement.aspx. Accessed 5 May, 2023

TO THE READER

The Land and Water Conservation Board (LWCB or Board) connects local and state governments on conservation and farmland preservation issues. The Board has many duties under Wis. Stat. § 92.04(4) including, reviewing county land and water resource management plans, reviewing the allocation of state conservation funds, advising the University of Wisconsin System, etc. LWCB is comprised of 11 members who represent the Governor's Office, state agencies, county land conservation committees, urban communities, agricultural producers, river management, and natural resource interests. Chairperson Mark Cupp – Executive Director of the Lower Wisconsin State Riverway Board, currently presides over LWCB.

The Board expresses its gratitude to the soil and water conservation stakeholders who have invested their time and resources to participate in the *2023 Soil & Water Conservation Research and Educational Needs Survey*. Our vision is for this survey to provide a new forum to discuss emerging soil and water conservation issues in Wisconsin. We look forward to continuing our partnerships with you and remain committed to bringing more voices into the conversation.

EXECUTIVE SUMMARY

PURPOSE

The Wisconsin Land and Water Conservation Board supports healthy landscapes with stable soils, clean waters, and productive agriculture. LWCB believes in conservation research and promoting sound conservation practices across Wisconsin to achieve and sustain these healthy landscapes.

Achieving healthy landscapes requires input and support from Wisconsin communities and businesses, local/state/federal governments, and Tribal nations. The Board actively engages with these stakeholders to understand their soil & water conservation needs, the factors that influence their needs including, land use practices, economy, populations, culture etc., and the broader needs across the state. These engagements provide LWCB with a continuous source of present-day information. The Board relies on this valuable information when it acts, each year, to advise the University of Wisconsin System on soil & water conservation research and educational program needs.

METHODOLOGY

Within LWCB, the Advisory Committee on Research (Committee) is charged with leading soil & water conservation stakeholder engagement. In 2023, the Committee launched an annual survey to engage with conservation stakeholders. The Committee prioritized inclusivity when it assembled the 2023 conservation stakeholder engagement list, which included federal & state government, Tribal nations, county & local governments, county conservationists, businesses and non-profits related to agriculture & conservation, and the University of Wisconsin.

The 2023 survey was conducted on the SurveyMonkey virtual platform. An estimated 1,110 persons received an invitation by email or mail to participate in the survey. The survey asked respondents a range of questions to assess their priorities for soil research, water research, and outreach & educational needs related to soil and water. When the survey closed, 143 respondents (13% response rate) completed the survey. Stakeholder responses and feedback will be used to refine future surveys. Appendix – Figure 1 provides a breakdown of the stakeholder sectors represented by the respondents.

FINDINGS

The Committee, in collaboration with DATCP staff, have analyzed responses to the 2023 survey and offer the following findings. The complete response dataset can be provided upon request.

1) Stakeholders overwhelmingly reported – by a 2/3 majority – that soil & water outreach and education is their top conservation priority of need. This finding is consistent across every sector surveyed. Appendix – Figure 2 shows the top priorities for each sector.

   Within the realm of soil & water outreach and education, stakeholders are mainly concerned for the adoption of existing soil and water conservation practices. Specifically, respondents coalesced around a need for additional outreach and education to connect the economics of soil health practices & best management practices to leverage their adoption with producers at larger scales. Respondents also reported that producers would benefit from additional outreach

at the Tribal, state, and county level; however stakeholders reported they lacked the resources (funding and staff) to increase their outreach efforts. Appendix – Figure 3 shows the other areas of concern respondents identified within the domain of soil & water outreach and education.

2) Stakeholders next conservation priority of need is water research, specifically ground water quality. The level of interest here is highest among federal, state, and county governments as well as non-profits. These respondents generally had similar concerns for chemical, biological and nutrient contamination in groundwater supplies. Research and monitoring into the presence of perfluoroalkyl and polyfluoroalkyl substances (PFAS) and nitrogen in groundwater were the stakeholder's main areas of emphasis. Stakeholders are also concerned for surface water quality and the interactions of surface and ground water. Appendix – Figure 4 shows the other areas of concern respondents identified within the realm of water research.

3) Soil research was the lowest priority among respondents. Nevertheless, the private sector, tribal nations, and federal, state, and county governments all reported interest in soil research. Soil health – primarily soil health management systems and soil health assessments – received the highest level of support among these respondents. In this domain, respondents requested research that standardized soil health metrics/attributes/conditions that provide for healthy soils, good nutrient management, and carbon sequestration. Further research and development into successful agricultural management systems that prevent erosion, promote infiltration and increase soil health was also of interest to these stakeholders. Appendix – Figure 5 shows the other areas of concern respondents identified with respect to soil research.

RECOMMENDATIONS

In the pursuit of promoting sound conservation practices that reinforce healthy landscapes in Wisconsin, LWCB offers the following recommendations to its stakeholders and the University of Wisconsin System. Stakeholders with the means to support these recommendations should consider acting in their capacity to prioritize, incentivize, research and/or fund work within these areas. These recommendations are ranked by their overall importance to soil & water conservation stakeholders.

1) Further soil & water conservation efforts in Wisconsin by developing, supporting and/or researching the efficacy of outreach and education efforts that focus on increasing implementation, adoption, and/or the effectiveness of Wisconsin's existing and emerging soil and water conservation practices.

2) Lead, collaborate on and/or support groundwater research focused on the presence of chemical, biological, and nutrient contamination – namely PFAS and nitrogen – in Wisconsin's groundwater supplies.

3) Lead, collaborate on and/or support research and the development of soil health management systems and soil health assessments focused on standardizing soil health metrics/attributes/conditions that achieve healthy soils, good nutrient management, and carbon sequestration. Likewise, support research and development into agricultural management systems with the potential to prevent erosion, promote infiltration, and increase soil health.