

Jefferson County LWCD – DNR Healthy Lakes Grant Resolution

WHEREAS, the Jefferson County Land and Water Conservation Department (LWCD) is interested in obtaining a cost-share grant from the Wisconsin Department of Natural Resources for the purpose of implementing Healthy Lakes practices on land adjacent to Rock Lake (as described in the application);

WHEREAS, the Jefferson County LWCD attests to the validity and veracity of the statements and representations contained in the grant application;

WHEREAS, the grant agreement is requested to carry out the project; and

NOW, THEREFORE, BE IT RESOLVED, that the Jefferson County LWCD will meet the financial obligations necessary to fully and satisfactorily complete the project and hereby authorizes and empowers the following officials or employees to submit the following documents to the Wisconsin Department of Natural Resources for financial assistance that may be available:

Task	Title of Authorized Representative
Sign and submit a grant application	County Conservationist
Enter into a grant agreement with the DNR	County Conservationist
Submit quarterly and/or final reports to the DNR to satisfy the grant agreement, as appropriate	County Conservationist
Submit reimbursement request(s) to the DNR no later than the date specified in the grant agreement	County Conservationist

BE IT FURTHER RESOLVED that the Jefferson County LWCD will comply with all local, state and federal rules, regulations and ordinance relating to the project and the cost-share agreement.

Adopted on December 21, 2016.

I hereby certify that the foregoing resolution was duly adopted by the Jefferson County Land and Water Conservation Committee at a legal meeting held on December 21, 2016.

Authorized Signature of Secretary

Date Certified

Fiscal impact: This project will be implemented in partnership with the Rock Lake Improvement Association. Only LWCD staff time is needed for a contribution to the project. No LWCD funds other than staff time will be used.

#6

2017 WI Land+Water Annual Conference Registration Form

Postmark/Electronic Timestamp Deadline: **February 15, 2017**

Please submit one form per each registrant (guests/spouses of registrant use the same form).

Registrant Information		Conference Packages		Members	
Full Name: <i>As you would like it on badge</i>		Full Conference <i>Includes all sessions, events, select meals, and breaks.</i>		<input type="checkbox"/> \$275	
Guest/Spouse Full Name: <i>If attending</i>		Wednesday Only <i>Includes all sessions, events, select meals, and breaks.</i>		<input type="checkbox"/> \$110	
County:		Thursday Only <i>Includes all sessions, events, select meals, and breaks.</i>		<input type="checkbox"/> \$145	
Area Association:		Friday Only <i>Includes all sessions, events, select meals, and breaks.</i>		<input type="checkbox"/> \$100	
Affiliation/ Organization:		Guest/Spouse Registration <i>Includes all sessions, events, select meals, and breaks.</i>		<input type="checkbox"/> \$100	
Billing Address:		Late Registration Fee <i>For registrations Emailed, faxed or postmarked 02/16 to 03/03/2017.</i>		<input type="checkbox"/> \$15	
City:		Onsite Registration Fee <i>For registrations on or after 03/04/2017. DO NOT SEND TO WI Land+Water.</i>		<input type="checkbox"/> 20	
State:		TOTAL FEES: \$			
Zip:					
Phone:					
Email:					
Dietary needs: <i>If applicable</i>					
Breakout Sessions – Please select one in each timeslot. Refer to conference website page for session descriptions.					
Wed 1:45-2:45	<input type="checkbox"/> Understanding Conservation Planning and Certification	<input type="checkbox"/> Food, Land, and Water Project Update	<input type="checkbox"/> Lower Fox River Water Quality Monitoring	<input type="checkbox"/> Using Water Quality Monitoring Tools	<input type="checkbox"/> 10,000 Years of Wisconsin History
Wed 3:15-4:15	<input type="checkbox"/> Nutrient Management Where Food, Land, and Water Come Together	<input type="checkbox"/> County Presentations: Marathon (Grazing Public Grasslands) and Oneida (Pollinator Project)	<input type="checkbox"/> Black Bear Management in Wisconsin	<input type="checkbox"/> Stream Crossings	<input type="checkbox"/> NRCS Soil Survey Updates
Thurs 8:00-9:15	<input type="checkbox"/> Concrete: Forming, Placing, Consolidating, and Beyond	<input type="checkbox"/> A Tale of Two Tracking Systems	<input type="checkbox"/> Conservation and the 2017-2019 Biennial Budget Update	<input type="checkbox"/> What's Going On in the DNR's Lakes and Rivers Program?	
Thurs 9:45-11:00	<input type="checkbox"/> Can You Test That? Intro to Water Monitoring	<input type="checkbox"/> Erosion Control and Stormwater Management – Just the Facts!	<input type="checkbox"/> Addressing Water Quality in a Community: Citizens Perspective	<input type="checkbox"/> Farm Enterprise Budgeting	<input type="checkbox"/> Social Media 101
Thurs 1:15-2:30	<input type="checkbox"/> Introduction to Conservation Engineering	<input type="checkbox"/> Addressing Water Quality in a Community: Farmers Perspective	<input type="checkbox"/> County Options for Protecting or Improving Groundwater Quality	<input type="checkbox"/> County Presentations: Sauk (Using Your County Farm as a Demo Tool) and Walworth (Non-Metallic Mining and Bankruptcy – Lessons Learned)	
Thurs 3:00-4:15	<input type="checkbox"/> All Things 590 and Nutrient Management	<input type="checkbox"/> Youth Education: Getting the Ball & Keeping it Rolling	<input type="checkbox"/> Shoreland Zoning Updates	<input type="checkbox"/> Designing Roofing Systems	<input type="checkbox"/> Adaptive Management Project in Silver Creek
Fri 8:00-9:00	<input type="checkbox"/> General Session with Senator Tammy Baldwin (<i>invited</i>)				
Fri 9:15-10:15	<input type="checkbox"/> Moving Into Implementation: Adaptive Management and Trading	<input type="checkbox"/> NRCS Spreadsheets: Tools to Assist	<input type="checkbox"/> Cover Crops and Soil Health – Let's Get on Board!	<input type="checkbox"/> Fish Sticks – From Science to Implementation	

Please fax (608-441-2676), email (kim@wisconsinlandwater.org), or mail (WI Land+Water, 131 W. Wilson St. #601 Madison, WI 53703) this registration form. If you have already registered electronically, there is no need to fill out this form. The invoice for your registration will be emailed to the appropriate individual or department after the February 15 registration deadline.

Extra fees apply to registrations emailed/faxed/postmarked after February 15, 2017 and for onsite registration. Registrations are transferrable at any time. Cancellations received on or before March 3, 2017 will be refunded minus a \$25 cancellation fee. Cancellations or no-shows at conference on or after March 4, 2017 will be liable for the entire conference fee. Due to covering pre-paid costs, there are ABSOLUTELY NO EXCEPTIONS to the fee/cancellation schedule.

2017 Conference Breakout Sessions

***Sessions with an asterisk have been submitted for CEUs.**

Sessions eligible for Engineering Professional Development Hours (PDHs) have been noted.

Wednesday, March 15

Buffet Lunch 11:00am-Noon

OPENING LUNCHEON PRESENTATIONS (11:30-1:30pm): WI Land+Water Welcome, Winning Youth Speeches, and Keynote TBA.

1:45-2:45pm

Understanding Conservation Planning Concepts, Conservation Planning Certification, and Ecological Sciences Job Approval Authority*. What is the nine step process of planning and how does that assure quality resource protection? What does it mean to be planning certified and how do I reach that goal? What are Job Approvals for Resource Planners? *Speaker: Judy Derricks, NRCS.*

Food, Land, and Water Project Update*. Join Jim VandenBrook and others for an update on this project, which looks beyond the present moment to see the big picture, and thinks about our shared resources in a more systematic and collaborative way. This will include updates on the four workgroups: surface water, groundwater quality, groundwater quantity, and the future of Wisconsin working lands, as well as what to expect at the October 2017 conference.

Lower Fox River Watershed Water Quality Monitoring*. Extensive research is being conducted in the Lower Fox River watershed in a collaborative effort between United States Geological Survey and University of Wisconsin Green Bay. Sites have been established in-stream, at the edge of field, at tile outlets, in a treatment wetland, and in paired watersheds. The paired watershed sites are examining the effect of cover crops versus traditional, stable concentrated flow channels and grazing versus traditional. The researchers from both USGS and UWGB will discuss the studies along with the data to date. *Speakers: Jeremy Freund, Outagamie County LCD; Matt Komiskey and Paul Reneau, USGS; and Kevin Fermanich, UW-Green Bay.*

Using water quality modeling tools (such as SnapPlus and EPA's STEPL model) for determining milestones for and tracking implementation of 9 Key Element Watershed Plans, TMDL reaches, and County Land and Water Plans. This session will provide some case studies of how counties, in consultation with DNR, can use models to develop watershed plans that reflect TMDL pollutant reduction goals and how this effort aligns with County Land and Water Plan requirements and annual reporting. *Speaker: Andrew Craig, WDNR.* **1 Engineering Professional Development Hour**

10,000 Years of Wisconsin History. Since the first Henschel homesteader settled in Sheboygan County in 1849, the family's land has yielded evidence of 10,000 years of human occupation. This collection of artifacts is one of the most complete in Wisconsin. Gary Henschel will have a slideshow on their archeological digs and have artifacts on-hand. These items – chipped stone tools, projectile points, ground stone tools, bone tools, copper implements, and pottery – trace the lives and times of the original culture inhabiting the area.

3:15-4:15pm

Nutrient Management Where Food, Land, and Water Comes Together*. Implementing a nutrient management (NM) plan is one of the best ways farmers can do to protect their soil and water while providing food for the masses. Learn how NM is changing. See SnapPlus 16 and how it provides farmers with a conservation plan that protects their soil while also managing fertilizer or manure for profitability and compliance. *Speaker: Sue Porter, DATCP.*

County Presentations*: (1) *Grazing Public Grasslands To Improve Wildlife Habitat, Water Quality and Soil Health.* William Kolodziej, Marathon County, and Erin Grossman, WDNR, will share how Rotational Grazing reduces the amount of chemical and mechanical treatments to manage grasslands. The second year results are amazing from both the

wildlife and cattle perspectives. Graduate students have noticed increases in grassland wildlife and William has increased cattle performance in weight gain and reproduction. (2) *Oneida County Roadside Pollinator Project*. Michele Sadauskas, Oneida County LWCD, will present on how habitat loss and climate change have played large roles in the demise of native pollinators. In 2016, the Town of Three Lakes and Oneida County Land & Water partnered to restore pollinator habitat in the Three Lake, WI area. The project successfully restored 2,250 sq. ft. of pollinator habitat and began building connections within the community.

Black Bear Management in Wisconsin. DNR's David MacFarland will provide an overview of Wisconsin's black bear management program. The discussion will focus on bear range and population, harvest and conflict management, DNR research, and the future of the state's bear management program.

Stream Crossings. We will discuss the stream crossing standard and share many examples and field applications. Photos of before, during, and after construction will be shared with insights and lessons learned. Some time will be spent touching on the flood events in northern Wisconsin and the crossings affected in 2016. *Speakers: Stacy Dehne, DATCP and county staff TBA.* **1 Engineering Professional Development Hour**

NRCS Soil Survey Updates*. Chris Miller and Natalie Irizarry will present on the Major Land Resource Area (MLRA) approach to updating soil surveys. What changes are we seeing across Eastern Wisconsin? How does our work impact users of soil survey information? Why it is important to update your soil layers each and every fall?

Thursday, March 16

8:00-9:15am

Concrete: Forming, Placing, Consolidating, and Beyond. This session will focus on concrete construction and inspection according to the latest version of Wisconsin Construction Specification 4, Concrete. Construction and construction inspection requirements prior to, during, and following concrete placement will be discussed, including during special hot and cold weather conditions. *Speakers: Travis Buckley and Ryan Glassmaker, DATCP.* **1 Engineering Professional Development Hour**

A Tale of Two Tracking Systems. This session will acquaint you with two different types of software used for tracking landowners, BMPs, and other LWCD projects. We'll discuss tracking DNR/DATCP reporting needs, landowner/project documentation/inspections, ease of use, etc. Burnett and Vernon Counties will demo RESPEC'S MapFeeder and Columbia Transcendant's Ascent. *Speakers: Dave Ferris, Paul Cook, and Ann Lane, Burnett County LWCD; Kurt Calkins, Columbia County LCD; and Ben Wojahn, Vernon County LWCD.*

Conservation and the State of Wisconsin 2017-19 Biennial Budget*. Executive Director Jim VandenBrook; Dan Bahr, Government Affairs Associate from Wisconsin Counties Association; and Shawn Pfaff, Lobbyist for WI Land+Water will provide an update on what is and isn't in the proposed biennial budget for conservation. What is the Association's strategy to advocate for needed funding? What is your role the process?

What's going on in the DNR's Lakes and Rivers Program? The Department's Lakes and Rivers Section is home to a wide variety of programs benefitting the state's water resources. Attendees will learn what is currently being worked on including grants, planning, aquatic invasive species and much more. *Speaker: Bob Wakeman, DNR.*

9:45-11:00am

Can You Test That? An Introduction to Water Monitoring for Groundwater, Streams, Lakes and Runoff*. In this session, we will explore how your monitoring objectives along with pollutant and water characteristics can be used to understand water sampling and testing. Bring your questions (and answers) for an informal exploration of the "how", "why" and "why not" of monitoring groundwater, streams, lakes and runoff. *Speaker: Paul McGinley, UW-Extension/UW-Stevens Point.*

Erosion Control and Stormwater Management - Just the Facts! Get the inside scoop on construction site erosion control and post-construction stormwater management with regard to applicability, plan review and permit compliance. *Speakers: Alan Barrows, Waukesha County LWC and David Nashold, Chippewa County LCFM.*

Addressing Water Quality in a Community: Citizens Perspectives and Actions Taken. *(It is recommended to also attend the afternoon farmers' perspectives).* Local citizens and Environmental Advocacy Groups have been playing a vital role in demanding water quality issues be addressed within their communities. The Uteschs- representing Kewaunee Cares, Jodi Parins Town of Lincoln- Kewaunee County, along with Sarah Geers and Tressie Kamp Midwest Environmental Advocates will discuss their views on water quality issues and how they have engaged their neighbors to become involved and make their voices heard.

Farm Enterprise Budgeting. "Should I Plant corn, Convert to Pastures or....?" "How much are you making per acre planting corn?" "Are you better off converting your cropland to pasture and grazing animals on it or do something else?" These are just some of questions Sauk County conservation staff started asking our producers in 2016 to get them really thinking about the decisions that affect their farm businesses, as well as our soil and water resources. A simple enterprise budget is extremely beneficial to help producers assess the financial viability of their cropping systems. Many continue to operate as "normal" even if they are losing money. We, as conservation staff, are ill-equipped to answer some of these very basic questions. Conservation and finances go hand-in-hand. The goal is not to perform an all-inclusive financial plan for the farm. That's not our charge. It's to help them make some basic, simple decisions regarding their various farm enterprises. If we can show them the numbers, and show how conservation can pay, it seems to go a long way towards us "selling" conservation. *Speakers: Serge Koenig and Aaron Pape, Sauk County CPZ and Paul Dietmann, Badgerland Financial.*

Social Media 101. Share, Like, Retweet, Hashtag, SMH, LMFO... You no longer need to be lost when you hear these terms. Learn what they mean and how to use them to communicate directly to stakeholders in your county. *Speakers TBA.*

11:00am-12:45pm THURSDAY LUNCHEON PRESENTATION: How to Tell Your Story. Do you have an elevator (grain or hotel) speech? Do you know who you want to reach, and with what message? How prepared are you for your outreach efforts? This presentation aims to help you tell your story with tips from 40 years of communications experience. *Speaker: Bill Berry.*

1:15-2:30pm

Introduction to Conservation Engineering. This session will be jointly presented by Scott Mueller, NRCS, and Travis Buckley, DATCP, and will provide an overview of conservation engineering in Wisconsin. A variety of topics will be discussed including joint engineering job approval authority, practice standards, construction specifications, design tools, standard drawings, plans, and project construction. **1 Engineering Professional Development Hour**

Addressing Water Quality in a Community: Farmers Perspectives and Actions Taken*. Producer led initiative groups have been formed with assistance from agency sponsors to address water quality concerns in their communities. Rachel Rushmann, DATCP will explain the goals of the program, Don Niles Peninsula Pride (others to be named) will talk how the groups came about and what steps they are taking to achieve the water quality goals within their communities.

County Options for Protecting or Improving Groundwater Quality*. We'll start with maps showing the prevalence of nitrate and pesticides in Wisconsin's drinking water. Then dive into health effects the research has uncovered, and opportunities for counties to improve groundwater quality. We'll wrap up with results from three WI Land+Water demo projects to reduce nitrate levels. *Speakers: Lynn Markham, UW-Extension Center for Land Use Education and Christina Anderson, WI Land+Water.*

County Presentations: (1) Using Your County Farm as a Demonstration Tool*. Melissa Keenan, Sauk County CPZ, and John Sippl, NRCS, will present details on a 562 acre farm that is owned by Sauk County and leased out to local farmers

for 3 years at a time. In 2014, Sauk County CPZ modified the lease agreement to establish a demonstration farm to highlight conservation practices. This session will highlight the current projects on the farm and the changes made to the lease agreement. (2) *Non-Metallic Mining and Bankruptcy, Lessons Learned from Walworth County*. In 2013 eight non-metallic mining sites were subject to a bankruptcy filing. Shannon Haydin and Fay Amerson will share how county staff got involved early and called in the bonds that had been issued for reclamation. By the end of 2015, all sites had been successfully reclaimed by new operators. Lessons were learned on how to successfully obtain reclamation for sites subject to bankruptcy.

3:00-4:15pm

All Things 590 and Nutrient Management: Updates and Discussion*. Presenters Sara Walling (DATCP) and Judy Derricks (NRCS) will walk through the main changes to the 590 NM Standard and the revisions made to ATCP 50 to implement the new 590 Standard. Time will be allowed for questions, comments, and audience/presenter discussions to take place.

Youth Education: Getting the ball and keeping it rolling! The WI Land+Water Youth Education Committee will briefly describe our current statewide programs: Poster and Speaking Contest, WI Envirothon, and both Conservation Camps. Two counties will go in depth about their successful contests and reveal tricks to increase participation. As a group we'll share struggles, successes and program ideas.

Shoreland Zoning Updates: Acts 55, 167 and 391. Shoreland zoning standards were changed by the state budget bill in July 2015 and additional statutory revisions again in 2016. State law now says counties cannot have shoreland standards more protective or restrictive than state standards. DNR's Kay Lutze will discuss the specifics as well as the impact to shoreland zoning ordinances.

Designing Roofing Systems – Daniel Pederson and Randy Robideaux, Walters Building – Awaiting session details. **1 Engineering Professional Development Hour**

Adaptive Management Pilot Watershed Project in Silver Creek*. NEW Water is conducting a pilot project to evaluate the cost effectiveness of working with the agricultural community to reduce sediment and phosphorus in Silver Creek. This project will help guide NEW Water in the development of a future full scale Adaptive Management program to achieve continued permit compliance. *Speakers: Jeff Smudde, NEW Water and Nikki Truymen, Outagamie County LCD.*

Friday, March 17

8:00-9:00am – U.S. Senator Tammy Baldwin, invited

9:15-10:15am

Moving Into Implementation - Adaptive Management and Trading: A new attempt at connecting Point and Non-Point Sources*. First you'll hear how for the past four years Dane County has been assisting the Madison Metropolitan Sewage District with pilot testing the adaptive management permit compliance option. Efforts are currently underway to move into full scale implementation. Information on the counties role in assisting with adaptive management as well as the types of practices that are being implemented and credited towards adaptive management will be presented. Next Monroe County will speak to the implementation side of P-trading and the LCD's role. The talk will center around P-trading with the Sparta WTF which has been on-going since 2014. They are also working with other municipalities who are interested in P-trading with implementation likely in 2017. Then Columbia County will discuss the implementation of the City of Lodi's approach to its new 5-year permit cycle that starts in 2017 and how the county is involved. *Speakers: Kurt Calkins, Columbia County LWCD; Kyle Minks, Dane County LWRD and Bob Micheal, Monroe County LCD.* **1**

Engineering Professional Development Hour

NRCS Spreadsheets - Tools to assist in the design of typical engineering practices*. NRCS' Scott Mueller will walk through the NRCS Engineering Spreadsheets, demonstrate their use, and answer questions. **1 Engineering Professional Development Hour**

Cover Crops and Soil Health Let's Get on Board!* There is a great deal of excitement around the state surrounding cover crops and soil health. Jamie Patton, UW-Extension Shawano County, and Heidi Johnson, UW-Extension Dane County, will discuss why this is and the role cover crops play in soil conservation and water quality. The development and use of the new UW-Extension cover crop website will be discussed.

Fish Sticks - From Science to Implementation. WDNR's Scott Toshner will present on the science of wood habitat in littoral zones of lakes. Implementation and discussion of permitting, best practices manual, and example projects ranging large to small. Frequently asked questions will be covered and there will be time for discussion.

10:45-11:45am Annual Business Meeting



United States Department of Agriculture

Conservation Stewardship Program



Your Stewardship Goals. Our Assistance.

Have you ever looked across your property and thought about some land management goals you would like to take to the next level? Maybe we can help.

No one knows more about your land than you do, and no one knows more about conservation than we do. Together we can develop a plan tailored to your land and your goals to help you increase productivity and protect the value of your land.

Conservation Stewardship Program (CSP) helps you build on your existing conservation efforts while strengthening your operation. Whether you are looking to improve grazing conditions, increase crop yields, or develop wildlife habitat, we can custom design a CSP plan to help you meet those goals. We can help you schedule timely planting of cover crops, develop a grazing plan that will improve your forage base, implement no-till to reduce erosion or manage forested areas in a way that benefits wildlife habitat. If you are already taking steps to improve the condition of the land, chances are CSP can help you find new ways to meet your goals.

Sustainable Production

CSP is for working lands. It is the largest conservation program in the United States with 70 million acres of productive agricultural and forest land enrolled in CSP. Thousands of people have chosen to enroll in the program because it helps them enhance natural resources and improve their business operation.

CSP participants are seeing real results. Some of these benefits include:

- Increase in cattle gains per acre
- Increase in crop yields
- Increase in wildlife populations
- Decrease in producer inputs
- Greater resilience to impacts of weather extremes

Through CSP, we can help you build your business while implementing conservation practices that help ensure the sustainability of your entire operation. Good land stewardship not only conserves the natural resources on your farm, ranch or forest, it also provides multiple benefits to local communities, including better water and air quality and wildlife habitat, as well as food and fiber.

Management Makes a Difference

Every piece of property is unique with opportunities to improve natural resources and address any areas of concern. Human activities contribute to the condition of natural resources on the land -- they can help improve them or contribute to their decline, which can result in what we refer to as a "resource concern." We can help you recognize the resources on your land and develop a management plan to improve them. Examples of CSP management activities that can improve resource concerns are:

- Grazing management to improve wildlife habitat
- Extend filter strips to reduce excess sediment, nutrients and chemicals in surface water



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www.nrcs.usda.gov

Conservation Stewardship Program

- Plant cover crops to reduce wind and water erosion
- Plant range grasses to improve soil health and wildlife habitat

How does CSP Work?

Most agriculture producers approved to participate in CSP have already been implementing conservation practices on their land. CSP steps in and offers enhancements for those practices. For example, if you have been practicing prescribed grazing, CSP would give you options to enhance that practice with activities such as grazing management to improve plants for wildlife, or grazing management to reduce soil compaction, or grazing management to improve riparian function, just to name a few.

If you decide to enroll in CSP, the local NRCS conservation planner will have a one-on-one consultation with you to evaluate your current management system and the natural resources on your land. Then the NRCS conservation planner will present a variety of CSP enhancement alternatives for you to consider implementing on your land, based on existing conservation practices. The variety of CSP practices that are offered give you a lot of freedom to select enhancements that help you meet your management goals. These improvements work naturally with your land to bring out your land's best potential.

Once you choose the enhancements that best fit your operation, CSP offers annual incentive payments for installing these practices on your land. If you want to take it even a step further, CSP also offers bundles where you can select a suite of enhancements to implement and receive an even higher payment rate.

Investment in the Future

From enrollment to planning and implementation, many CSP participants feel the process of working with their NRCS conservation planner helps build an awareness about the resources on their land and helps them look at their land in a more comprehensive and engaging manner. Most participants find that the reporting and tracking that they do in CSP gives them valuable information to refine their operation and make management adjustments that have a positive outcome on their land and their bottom line.

CSP Contracts

The program represents a genuine commitment to conservation – CSP contracts are for five years, with the option to renew if you successfully fulfill the initial contract

and agree to achieve additional conservation objectives. An NRCS conservation planner will work closely with you throughout the entire process.

Contract payments are based on two components:

- payments to maintain the existing conservation based on the operation type and number of resource concerns that are meeting the stewardship level at the time of application and
- payments to implement additional conservation activities.

All CSP contracts will have a minimum annual payment of \$1500.

You will be required to maintain the stewardship level of the resource concerns you are already meeting plus meet or exceed at least one additional resource concern in each land use by the end of the contract. If the objectives of the initial CSP contract are achieved, you may be eligible to re-enroll for an additional 5 year contract if you agree to adopt additional conservation activities to meet or exceed two additional priority resource concerns.

Am I eligible for CSP?

To participate in CSP, you must be in compliance with highly erodible land and wetland conservation requirements, and have current farm records with USDA Farm Service Agency. You must have effective control of the land for the term of the proposed contract, be actively engaged in the day-to-day management of the agricultural operation and share in the risks associated with agricultural production. You must also be meeting the stewardship threshold for at least two resource concerns at the time of application. Contact [your local NRCS office](#) to learn more about the program and determine if you meet these requirements.

How do I apply?

If you feel like you are ready to take your conservation efforts to the next level – we are here to help. You can apply for CSP any time throughout the year but there will be announced cutoff dates for ranking and funding opportunities. For more information on applications visit www.nrcs.usda.gov/csp or visit your local Service Center.





Green Lake, Green Lake County - Lisa Reas

WISCONSIN'S HEALTHY LAKES IMPLEMENTATION PLAN



2014-2017



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Team Members:

Dave Ferris, Burnett County Land and Water Conservation Department
 Pat Goggin, Lake Specialist, UW-Extension Lakes
 Jane Malischke, Wisconsin DNR Environmental Grants Specialist
 Tom Onofrey, Marquette County Zoning Department
 Carroll Schaal, Wisconsin DNR Lakes and Rivers Section Chief
 Pamela Toshner, Wisconsin DNR Lake Biologist



The statewide Healthy Lakes initiative is a true, collaborative team effort. The Healthy Lakes Implementation Plan describes relatively simple and inexpensive best practices that lakeshore property owners can implement. The Plan also includes funding/accountability, promotion, and evaluation information so we can grow and adapt the Plan and our statewide strategy to implement it into the future. Working together, we can make Healthy Lakes for current and future generations.

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Wisconsin's lakes define our state, local communities, and our own identities. Fond memories of splashing in the water, seeing moonlight reflect off the lake, and catching a lunker last a lifetime. With over 15,000 lakes dotting the landscape, it's no surprise that fishing alone generates a \$2.3 billion economic impact each year, and the majority of property tax base rests along shorelines in some of our counties. Unfortunately, we've learned through science that our love for lakes causes management challenges, including declines in habitat and water quality. In fact, the loss of lakeshore habitat was the number one stressor of lake health at a national scale. Lakes with poor lakeshore habitat tend to have poor water quality. Working together to implement *Wisconsin's Healthy Lakes Implementation Plan* (Plan), we can improve and protect our lakes for future generations to enjoy, as well.

This Plan identifies relatively simple habitat and water quality best practices that may be implemented on the most typical lakeshore properties in Wisconsin. We encourage do-it-yourselfers to use these practices but have also created a Wisconsin Department of Natural Resources (DNR) Lake Classification and Protection Grant *Healthy Lakes* sub-category for funding assistance. Furthermore, local partners like lake groups and counties may choose to integrate the Plan into their lake management, comprehensive planning, and shoreland zoning ordinance efforts.

It's important to consider this plan in the context of the lake and local community's management complexity. The best practices' effectiveness will increase cumulatively with additional property owner participation and depend on the nature and location of the lake. For example, if every property owner implemented appropriate Healthy Lakes best practices on a small seepage lake, also known as a pothole or kettle lake, within a forested watershed, the impact would be greater than on a large impoundment in an agricultural region of Wisconsin. Nevertheless, all lakes will benefit from these best practices, and even with limited impact, they are a piece of the overall lake management puzzle that lakeshore property owners can directly control. More lakeshore property owners choosing to implement Healthy Lakes best practices through time means positive incremental change and eventually success at improving and protecting our lakes for everyone.



GOALS AND OBJECTIVES

Wisconsin's Healthy Lakes Implementation Plan goal is to protect and improve the health of our lakes by increasing lakeshore property owner participation in habitat restoration and runoff and erosion control projects.

- Statewide objective: single-parcel participation in Healthy Lakes will increase 100% in 3 years (i.e. 2015 to 2017).
- Individual lake objective: lake groups or other partners may identify their own habitat, water quality, and/or participation goal(s) through a local planning and public participation process.
 - ♦ Partners may adopt this Plan, as is by resolution, or integrate the Plan into a complimentary planning process such as lake management or comprehensive planning.

Wisconsin's Healthy Lakes Implementation Plan, and the diversion and rock infiltration practices in particular, are not intended for heavily developed parcels, sites with large volumes of runoff, or sites with complex problems that may require engineering design. Technical assistance and funding are still available for these sites; contact your county land and water conservation department or local DNR lakes biologist for more information.

The target audience for this Plan and implementation of the associated practices is lakeshore property owners, including: permanent and seasonal homeowners, municipalities, and businesses.

It will be necessary to do additional planning work to implement Wisconsin's Healthy Lakes Plan and, again, the level of effort will depend on the complexity of the lake and its local community. Planning could be as simple as site-specific property visits and development of design plans, to integrating the Plan into a broader and more comprehensive effort. Your lake group, county land and water conservation department, non-profit conservation association, UW-extension lakes specialist or local educator, and/or DNR lake biologist can provide planning guidance or contacts.



ILLUSTRATION: KAREN ENGELBRETSON

DEFINITIONS

Best

practice: a working method, described in detail, which has consistently shown results.

Divert: redirect runoff water.

Habitat: where a plant or animal lives.

Infiltrate: soak into the ground.

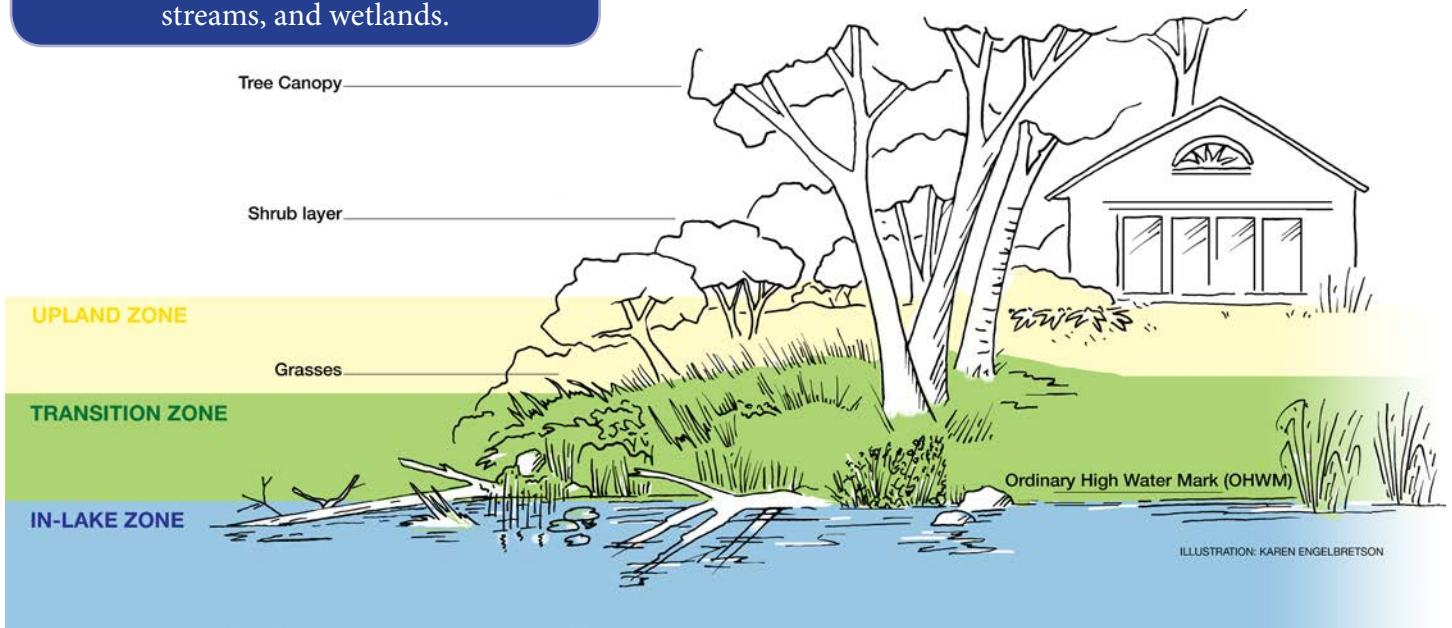
Installed: project cost that includes all materials, labor, and transportation.

Runoff: rain and snowmelt that doesn't soak into the ground and instead moves downhill across land and eventually into lakes, streams, and wetlands.

Wisconsin's Healthy Lakes Implementation Plan divides a typical lakeshore parcel into the following 3 management zones: 1) in-lake, 2) transition, and 3) upland (see illustration below). Best practices are identified for each zone. A team selected these practices based on customer feedback. These practices are:

- relatively simple and inexpensive to implement,
- appropriate for typical lakeshore properties, and
- beneficial to lake habitat and/or water quality.

The Plan also provides cost ranges and averages and technical, regulatory, and funding information for each practice. Fact sheets for each best practice support the Plan and provide more technical detail, and additional guidance is referenced if it currently exists. There is also a funding and administration FAQ fact sheet for those considering pursuing Healthy Lakes grants.



HEALTHY LAKES PLAN

BEST PRACTICES

Best practice descriptions follow. Each description defines the practice, identifies lake health benefits, provides cost ranges and averages based on recent projects, and identifies additional technical and regulatory information. The costs provided are installed costs, which include all materials, labor, and transportation but do not include technical assistance, including design and project management/administration work. Cost ranges are a result of geographic location, property conditions like soils and slopes, and contractor supply and proximity to the project site.

PRACTICE 1 | FISH STICKS

...large woody habitat structures that utilize whole trees grouped together resulting in the placement of more than one tree per 50 feet of shoreline. Fish Sticks structures are anchored to the shore and are partially or fully submerged.



Bony Lake, Bayfield County - Pamela Toshner


LAKE HEALTH BENEFITS	<p>Improve fish and wildlife habitat Prevent shoreline erosion</p> 
COSTS	<p>Range - \$100-\$1000 per cluster (3-5 trees), installed Average - Cost per unit (3-5 trees) averages \$500, installed</p>
TECHNICAL REQUIREMENTS	<p>Healthy Lakes Fact Sheet Series: <i>Fish Sticks</i> http://tinyurl.com/healthylakes</p> <p>DNR Fish Sticks Best Practices Manual http://dnr.wi.gov (search for <i>Fish Sticks best practices</i>)</p> 
REGULATORY INFORMATION	<p>DNR: Habitat Structure - Fish Sticks General Permit (\$303 fee unless DNR grant-funded)</p> <p>Fish Sticks must comply with the local shoreland zoning ordinance. Consult with your county or municipal zoning staff.</p>
HEALTHY LAKES GRANT FUNDING	<p>Maximum of \$1000/cluster of 3-5 trees</p> <p>Fish Sticks may be a stand-alone grant activity only if the vegetation protection area (i.e. buffer) complies with local shoreland zoning. If not, the property owner must commit to leaving a 350 ft² area un-mowed at the base of the cluster(s) or implement native plantings (Practice 2).</p>

PRACTICE 2 | 350 FT² NATIVE PLANTINGS

...template planting plans with corresponding lists of native plants suited to the given function of the plan. The 350 ft² area should be planted adjacent to the lake and include a contiguous area, rather than be planted in patches. Functions are based on the goals for the site. For example, one property owner may want to increase bird and butterfly habitat while another would like to fix an area with bare soil. Native planting functions include the following: lakeshore, bird/butterfly habitat, woodland, low-growing, deer resistant, and bare soil area plantings.



Green Lake, Green Lake County - Lisa Reas

LAKE HEALTH BENEFITS	<p>Improve wildlife habitat Slow water runoff Promote natural beauty</p>   
COSTS	<p>Range - \$480-\$2400 for 350 ft² area, installed Average - \$1000 per 350 ft², installed</p>
TECHNICAL REQUIREMENTS	<p>Healthy Lakes Fact Sheet Series: <i>350 ft² Native Plantings</i> http://tinyurl.com/healthylakes</p>  <p>350 ft² Native Plantings Best Practices Manual</p>
REGULATORY INFORMATION	<p>DNR: an aquatic plant chemical control permit may be necessary if using herbicides in or adjacent to the lakeshore.</p> <p>Native plantings must comply with the local shoreland zoning ordinance. Consult with your county or municipal zoning staff.</p>
HEALTHY LAKES GRANT FUNDING	<p>Maximum of \$1000/350 ft² native plantings installed and implemented according to the technical requirements. Only one 350 ft² native planting per property per year is eligible for funding.</p> <p>The native plantings dimension must be 350 ft² of contiguous area at least 10 feet wide and installed along the lakeshore. Final shape and orientation to the shore are flexible.</p>

PRACTICE 3 | DIVERSION PRACTICE

...includes a water bar, diverter, and broad-based dip. These practices use a berm or shallow trench to intercept runoff from a path or road and divert it into a dispersion area. Depending on the site, multiple diversion practices may be necessary.



<http://awwatersheds.org>

LAKE HEALTH BENEFITS	Divert runoff water.	
COSTS	Range - \$25-\$3750, installed Average - \$200, installed	
TECHNICAL REQUIREMENTS	Healthy Lakes Fact Sheet Series: <i>Diversion Practice</i> http://tinyurl.com/healthylakes	
REGULATORY INFORMATION	DNR: none. Diversion practices must comply with the local shoreland and floodplain zoning ordinance. Consult with your county or municipal zoning staff.	
HEALTHY LAKES GRANT FUNDING	Maximum of \$1000/diversion practice installed and implemented according to the technical requirements. Healthy Lakes diversion practice grant funding is not intended for large, heavily developed parcels, sites with large volumes of runoff, or sites with complex problems that may require engineering design.	

PRACTICE 3 | DIVERSION PRACTICE

...includes a water bar, diverter, and broad-based dip. These practices use a berm or shallow trench to intercept runoff from a path or road and divert it into a dispersion area. Depending on the site, multiple diversion practices may be necessary.



<http://awwatersheds.org>





LAKE HEALTH BENEFITS	Divert runoff water.	
COSTS	<u>Range</u> - \$25-\$3750, installed <u>Average</u> - \$200, installed	
TECHNICAL REQUIREMENTS	Healthy Lakes Fact Sheet Series: <i>Diversion Practice</i> http://tinyurl.com/healthylakes	
REGULATORY INFORMATION	DNR: none. Diversion practices must comply with the local shoreland and floodplain zoning ordinance. Consult with your county or municipal zoning staff.	
HEALTHY LAKES GRANT FUNDING	Maximum of \$1000/diversion practice installed and implemented according to the technical requirements. Healthy Lakes diversion practice grant funding is not intended for large, heavily developed parcels, sites with large volumes of runoff, or sites with complex problems that may require engineering design.	

PRACTICE 4 | ROCK INFILTRATION PRACTICE

...ian excavated pit or trench filled with rock that reduces runoff by storing it underground to infiltrate. A catch basin and/or perforated pipe surrounded by gravel and lined with sturdy landscape fabric may be integrated into the design to capture, pre-treat, and redirect water to the pit or trench. Pit and trench size and holding capacity are a function of the area draining to it and the permeability of the underlying soil.



Deer Lake, Polk County - Cheryl Clemens



LAKE HEALTH BENEFITS	<div>Divert runoff water.</div> <div>Clean runoff water.</div> <div>Infiltrate runoff water.</div> <div>    </div>
COSTS	<p>Range - \$510-\$9688 per rock infiltration practice, installed</p> <p>Average - \$3800 per rock infiltration practice, installed</p>
TECHNICAL REQUIREMENTS	<p>Healthy Lakes Fact Sheet Series: <i>Rock Infiltration Practice</i></p> <p>http://tinyurl.com/healthylakes</p> 
REGULATORY INFORMATION	<p>DNR: none.</p> <p>Rock infiltration practices must comply with the local shoreland zoning ordinance. Consult with your county or municipal zoning staff.</p>
HEALTHY LAKES GRANT FUNDING	<p>Maximum of \$1000/rock infiltration practice installed and implemented according to the technical requirements.</p> <p>Healthy Lakes rock infiltration practice grant funding is not intended for heavily developed parcels, sites with large volumes of runoff, or sites with complex problems that may require engineering design.</p>

PRACTICE 5 | RAIN GARDEN

...a landscaped shallow depression with loose soil designed to collect roof and driveway runoff.



Shell Lake, Washburn County - Brent Edlin

LAKE HEALTH BENEFITS	<p>Improve wildlife habitat. Divert runoff water. Clean runoff water. Infiltrate runoff water. Promote natural beauty.</p> 
COSTS	<p>Range - \$500-\$9000 per rain garden, installed Average - \$2500 per rain garden, installed</p>
TECHNICAL REQUIREMENTS	<p>Healthy Lakes Fact Sheet Series: <i>Rain Garden</i> http://tinyurl.com/healthylakes</p> <p><i>Rain Gardens: A How-to Manual for Homeowners</i> http://dnr.wi.gov/topic/Stormwater/documents/RgManual.pdf</p> 
REGULATORY INFORMATION	<p>DNR: none.</p> <p>Rain gardens must comply with the local shoreland zoning ordinance. Consult with your county or municipal zoning staff.</p>
HEALTHY LAKES GRANT FUNDING	<p>Maximum of \$1000/rain garden installed and implemented according to the technical requirements.</p> <p>Healthy Lakes rain garden grant funding is not intended for heavily developed parcels, sites with large volumes of runoff, or sites with complex problems that may require engineering design.</p>

FUNDING AND ACCOUNTABILITY

Administrative details and the application process are described in detail in the DNR's Water Grant Application and Guidelines (<http://dnr.wi.gov/> search for surface water grants) and the Healthy Lakes website (<http://tinyurl.com/healthylakes>) and *Administration and Funding FAQ* fact sheet.

Healthy Lakes grant funding highlights:

- 75% state share grant with a maximum award of \$25,000, including up to 10% of the state share available for technical assistance and project management. Technical assistance and project management do not include labor and are based on the entire state share of the grant, not the best practice caps.
- 25% match from sponsors, participating property owners or other partners. The grant sponsor may determine individual property owner cost share rates, provided the state's share of the practice caps (\$1000) and total grant award (75%) are not exceeded. The grant sponsor's match may include technical assistance and project management costs beyond the state's 10% share.
- Sponsor may apply on behalf of multiple property owners, and the property owners do not have to be on the same lake.
- Standard 2-year grant timeline to encourage shovel-ready projects.
- Landowners may sign a participation pledge to document strong interest in following through with the project.
- Standard deliverables, including a signed Conservation Commitment with operation and maintenance information and 10-year requirement to leave projects in place. Also:
 - ♦ Native plantings must remain in place according to local zoning specs if within the vegetation protection area (i.e. buffer).
 - ♦ Fish Sticks projects require a 350 ft² native planting at shoreline base or commitment not to mow, if the property does not comply with the shoreland vegetation protection area (i.e. buffer) specifications described in the local shoreland zoning ordinance.
- Standardized application and reporting forms and process.
- 10% of projects randomly chosen each year for self-reporting and/or professional site visits.

PROMOTION

Wisconsin's Healthy Lakes Implementation Plan will be supported and promoted as a statewide program. Lake groups, counties, towns, villages, cities, and other partners may choose to adopt and implement the Plan as is or to integrate into their own planning processes. Statewide promotion, shared and supported by all partners, includes the following:

- A Healthy Lakes logo/brand.
- A website with plan, practice, and funding detail to be housed on the Wisconsin Department of Natural Resources' and University of Wisconsin-Extension Lakes' websites. It may also include the following:
 - ♦ Link to science and supporting plans.
 - ♦ Shoreline restoration video.
 - ♦ How-to YouTube clips.
 - ♦ Tips on how to communicate and market healthy lakeshores.
 - ♦ Maps with project locations without personally identifiable information.



Wisconsin's Healthy Lakes Implementation Plan and results will be evaluated annually and updated in 2017, if warranted. Best practices may be modified, removed, or added depending on the results evaluation.

The following information will be collected to support an objective evaluation:

- County and lake geographic distribution and participation in Healthy Lakes projects.
- Lakeshore property owner participation in Healthy Lakes projects, including numbers and locations of best practices implemented.
- Standardized Healthy Lakes grant project deliverable report including:
 - ◆ Numbers of Fish Sticks trees and clusters.
 - ◆ Dimensional areas restored.
 - ◆ Structure/floral diversity (i.e. species richness).
 - ◆ Impervious surface area and estimated water volumes captured for infiltration.



Lime Lake, Portage County - Robert Korth

The results may be used to model nutrient loading reductions at parcel, lake, and broader scales and to customize future self-reporting options, like plant mortality and fish and wildlife observations, for lakeshore property owners.

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L to R: Patrick Goggin, Jane Malischke, Pamela Toshner, Carroll Schaal, Tom Onofrey, Dave Ferris

Wisconsin's Healthy Lakes Implementation Plan and corresponding technical information and grant funding are the results of a collaborative and participatory team effort. We would like to thank the staff, agency, business, and citizen partners, including *Advanced Lake Leaders*, who provided feedback for our team, including the many partners who completed a customer survey and provided valuable comments during the public

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We appreciate your continued feedback as our Healthy Lakes initiative evolves into the future. Please contact DNR Lake Biologist Pamela Toshner (715) 635-4073 or pamela.toshner@wisconsin.gov if you have comments or questions.