



# Lakes Partnership hosts 26th Annual Wisconsin Lakes Convention

April 15-17, 2004

KI Convention Center and Regency Suites, Green Bay

*The Wisconsin Lakes Convention is the largest gathering in the nation of people concerned with our lakes and waters. Dedicated volunteers, agencies, universities, experts and policy makers come together each spring because they care!*

You might be thinking, *“That’s nice...but why should I go or why should my lake organization send people to this one?”* Your answers to the following questions should tell you if you should attend: Do you care about Wisconsin lakes? Would you like to sit down and talk to someone that can give you some straight answers about your lake and water challenges? Are you interested in what is new around the state regarding research, water policy, regulations and rules? Would you like to have your voice heard on courses of action for Wisconsin lake management? Do you enjoy seeing old lake friends and catching up? If you are answering “YES!” to these questions, you owe it to your lake to attend the *26<sup>th</sup> Annual Wisconsin Lakes Convention*.

Hundreds of state lake organizations regularly send a delegation to the Wisconsin Lakes Convention. They understand it can be one of the best uses of their time and dollars. Lake organization members can voice their concerns and learn more in three days than they could using other methods during the entire year.

Much has happened over the past year and much is in store for our lakes and their future. Once again, diverse water organizations will come together on Thursday during, **“Where the Waters Meet.”** This workshop explores the theme

of “Tools for Citizen Involvement,” drawing from the expertise of many water and conservation groups. Breakout sessions will address such issues as citizen monitoring, conservation easements and other tools for natural resource protection, capacity building for citizen groups, sustainable water use and more!

Friday and Saturday’s convention lineup includes reviews of Wisconsin’s shoreland management program, budget cuts that may impact your lake, how to engage in state-wide protection programs, and lessening the impact of lakeshore development. These are only a few of the issues that will be addressed at the *26<sup>th</sup> Annual Wisconsin Lakes Convention!* This convention represents a unique opportunity to listen, learn and discuss with others your experiences and questions on lake and water resource management, law, fisheries, shoreland restoration, youth and adult education and other important matters.

*Join us in Green Bay this April. Keep the future of our lakes in good hands...yours!*

**LakeTide**  
The newsletter for people interested in Wisconsin lakes

Volume 29, No. 1 Winter 2004

**Wisconsin Lakes Partnership**

**The Nature of Water**  
**Wisconsin Lakes Convention**  
**April 15-17, 2004**  
**K1 Convention Center and Regency Suites, Green Bay**  
**Thursday, April 17**

Where the  
aters Mee**t**

Thursday

**8:00a-9:00p Registration Open**

**10:00a-7:00p Exhibit Hall Open**

**9:30-11:00a Plenary**

**Opening Remarks** - Peter Murray, WAL, Master of Ceremony  
 Jim Holperin, Secretary, Wisconsin Department of Tourism (invited)

**Citizen Involvement: An Inspiration for Action and Tools to Help**

Statewide conservation groups will describe tools that their respective organizations can offer you and share citizen success stories.

Panel: Peter Murray, WAL; Vicki Elkin, Gathering Waters Conservancy; Kevin Pomeroy, 1000 Friends of Wisconsin; Denny Caneff, River Alliance of Wisconsin; Wisconsin Wetlands Association; and Arnie Mancl, Wisconsin Groundwater Association

**11:30a-Noon Plenary**

**Putting the Pieces Together for an Effective Statewide Volunteer Monitoring Network** - Todd Ambs, Water Division Administrator, WDNR

**Noon-1:15p Lunch**

**Waters of Wisconsin: An Update and Next Steps** - Shaili Pfeiffer, Wisconsin Academy of Sciences, Arts, and Letters

**1:30-3:00p**

**Concurrent breakout sessions** (for session descriptions, see pages 4-5)

*Session A: Clean Boats, Clean Waters Volunteer Watercraft Inspection and Self-Help Lake Monitoring Programs*

*Session B: Making Statewide Environmental Policy*

*Session C: Opportunities for Citizens to Use the Clean Water Act*

*Session D: Capacity Building for Citizens Groups, Part I*

*Session E: Conservation Easements and Other Land Protection Tools*

*Session F: Protecting Our Groundwater, Part I*

**3:30-5:00p**

**Concurrent breakout sessions** (for session descriptions, see pages 4-5)

*Session A: Citizen-based River and Watershed Monitoring in Wisconsin*

*Session B: Environmental Policy at the Local Level*

*Session C: Coon Valley Revisited: Toward More Collaborative Watershed Restoration*

*Session D: Capacity Building for Citizens Groups, Part II*

*Session E: The Value of Natural Resources Protection: Economic and Community Benefits of Good Land Use Policies*

*Session F: Protecting Our Groundwater, Part II*

**5:30-6:30p**

**Dinner** with Peg Lautenschlager, Wisconsin Attorney General (invited)

**7:00-9:00p**

**Clean Boats, Clean Waters: Volunteer Watercraft Monitoring Training Workshop** (pre-registration required) - Laura Felda, UW-Extension; Mandy Beall, WDNR/UW-Extension; Laura Herman, WDNR



**The Nature of Water**  
**Wisconsin Lakes Convention**  
**April 15-17, 2004**  
**K1 Convention Center and Regency Suites, Green Bay**  
**Friday, April 16 and Saturday, April 17**

The Nature  
of Water

Friday

- 7:30a-5:00p**    **Registration Open**  
**7:30a-7:00p**    **Exhibit Hall Open**  
**9:00-10:30a**    **Plenary**  
**Opening Remarks** – Jeff Bode, WDNR, Master of Ceremony, and Jim Brakken, WAL  
Governor Jim Doyle (invited)  
Scott Hassett, Secretary, WDNR  
**Change Without End: Wisconsin’s Lakes Past and Future** - Steven Carpenter, UW-Madison  
**The Nature of Lakes** (a multi-media slide presentation)  
**11:00-11:50a**    **Concurrent breakout sessions** (for stream descriptions, see page 5)  
*Stream A: Exploring the Natural History of Lakes*  
*Stream B: Whose Problem is it Anyway? The Ethics of Land and Water Management*  
*Stream C: Fisheries Management in Wisconsin: Past, Present and Future*  
*Stream D: Celebrating a Sense of Place*  
*Stream E: Land Matters: Riparians, Ecosystems and Related Issues*  
*Stream F: The Inside Story on Invasives*  
*Stream G: Topics in Limnology: Water Level Management*  
*Stream H: The Nuts and Bolts of Lake Management*  
**12:00-1:30p**    **Lake Stewardship Awards Lunch**  
**1:40-2:30p**    **Concurrent breakout sessions** (Streams A-H. See list above)  
**3:10-4:00p**    **Concurrent breakout sessions** (Streams A-H. See list above)  
**4:30-6:00p**    **Reception**  
**7:00-8:00p**    **County-wide Lakes Association Meeting**  
**7:00-9:00p**    **How to Create an Aquatic Plant Management Plan**  
Frank Koshere and Carroll Schaal, WDNR

[www.uwsp.edu/cnr/uwexplakes/conventions](http://www.uwsp.edu/cnr/uwexplakes/conventions)

Saturday

- 7:45-9:00a**    **Registration Open**  
**7:45-8:45a**    **Walking Tour of Green Bay’s Riverfront** - Paul Wozniak, Fox/Wolf Rivers Environmental History Project  
**Limnology 101-** Buzz Sorge and Jennifer Wudi, WDNR  
**8:00-9:00a**    **WAL Annual Meeting**  
**8:00-11:00a**    **Plants at the Root of a Healthy Ecosystem Workshop** (pre-registration required) - Learn how to ID aquatic plants with Susan Knight, UW-Madison  
**9:00-9:50a**    **Concurrent breakout sessions** (Streams A-H. See list above.)  
**10:05-11:00a** **Concurrent breakout sessions** (Streams A-H. See list above.)  
**11:15a-1:00p** **Lunch and Closing Ceremony**

Agenda subject to change without notice.



## *Thursday Breakout Session Descriptions*

# Session Descriptions

### **Clean Boats, Clean Waters Volunteer Watercraft Inspection and Self-Help Lake Monitoring Programs**

Do you have a desire to volunteer for lakes? Volunteer lake monitors have been an integral part of Wisconsin lakes since 1986. Participants in Self-Help have kept important records that document the history of lake health. Now, volunteers can help slow the movement of invasive species across the state by participating in watercraft inspection. Find out how and why to participate in each of these programs.

### **Making Statewide Environmental Policy**

Learn about crafting environmental policy at the state and local levels! Find out how a bill becomes a law and the differences between statutes, administrative code, and guidance. Also discover the role of public comments in the development of policy and how you can get involved. Learn from some real life examples of how citizens just like you have made a difference!

### **Opportunities for Citizens to Use the Clean Water Act**

Do you know how the Clean Water Act can help you protect your community? This session will offer you information and examples about the public input process, how to influence and monitor permits, as well as how to assess and use public information.

### **Capacity Building for Citizen Groups, Parts I and II**

Part I in this series focuses on maintaining the positive momentum of your group without burning out. Receive tips on recruiting and maintaining your volunteers and members, as well as getting and managing grants. Part II focuses on how to build an organization that is poised to achieve a common resource protection goal. Learn about setting and achieving goals for your group and planning successful projects that will meet resource protection goals.

### **Conservation Easements and Other Land Protection Tools**

Have you ever wondered how land trusts work and what tools they use to preserve important lands? Learn about landowners' experiences with these tools, plus how land trusts and lake groups can work together for shoreland and watershed conservation.

### **Protecting Our Groundwater, Parts I and II**

Part I of this two-part series will discuss the need for state protection of groundwater resources and what is being done to establish groundwater protection rules for Wisconsin. In Part II of this session, find out what communities can do to sustain groundwater resources using tools such as the wellhead protection ordinances, private well testing programs, and educational programs.

### **Citizen-based River and Watershed Monitoring in Wisconsin**

Find the "who, what, where, why and how" about a number of citizen-based river and watershed monitoring efforts in Wisconsin, from the Water Action Volunteers (WAV) program to programs offered at UW-Stevens Point and more.

### **Environmental Policy at the Local Level**

Discover how counties, cities, villages or towns make environmental policy—it may surprise you! Find out how you can get involved in these decisions and how others have made a difference. Smart Growth planning examples from counties and townships will be the focus.



### **Coon Valley Revisited: Toward More Collaborative Watershed Restoration**

The Coon Valley watershed restoration story provides a model of a number of important steps that citizens, local agencies, and others can take to restore whole watersheds instead of conducting restoration on a piece-by-piece basis. Examples of projects that are taking these steps will be provided.

### **The Value of Natural Resources Protection: Economic and Community Benefits of Good Land Use Policies**

What are the economic and community benefits of open space and natural resources protection? Explore answers to this question while looking at land use policies that can reduce negative development impacts on the environment, as well as provide real economic and community benefits.

## *Friday and Saturday Stream Descriptions*

*A stream features five breakout sessions on the topic. Details of individual sessions will be in the final agenda and online at [www.uwsp.edu/cnr/uwexplakes...click on Convention](http://www.uwsp.edu/cnr/uwexplakes...click on Convention).*

### **Exploring the Natural History of Lakes**

Learn about the natural wealth of lakes! This stream looks at the rich diversity of plant and animal life present in our waters. From the natural history of frogs to the ecology and management of wild rice, this stream offers participants insight into an exciting and fascinating world.

### **Whose Problem Is It Anyway? The Ethics of Land and Water Management**

How do communities around the world prioritize resource issues and what role do considerations of land and water quality play within their respective value systems? This stream plays with some basic philosophical questions and then launches into a discussion of current legal and policy issues. Also hear about some cutting edge research on recreational carrying capacity.

### **Fisheries Management in Wisconsin: Past, Present and Future**

Fishing tournaments-are they good or bad? What happens to fish when their habitat has been harvested? This stream looks at these and other pressing questions as it evaluates the current state of fisheries management in Wisconsin.

### **Celebrating a Sense of Place**

Consider the importance of your emotional connections to your lake. Photographs are terrific for capturing natural moments on film and journals can help you track the changes you observe on the landscape. This stream looks at the methods available to us to develop a positive sense of place.

### **Land Matters: Riparians, Ecosystems and Related Issues**

This stream begins with an analysis of the lawn phosphorus controversy and moves to a discussion of what sediment cores reveal about our changing lakes. Stewardship practices of responsible riparians will be addressed as well as the impact of stormwater on our lakes and rivers. Attend this stream for the latest on land, lakes and the dynamic relationship between the two.

### **The Inside Story on Invasives**

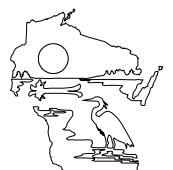
Aquatic invasives are on the move and Wisconsin is fighting back! This stream gives an overview of the status of the problem as well as some possible solutions to a troublesome trend.

### **Topics in Limnology: Water Level Management**

Lake levels fluctuate naturally, but what are the impacts of this on the ecology of the system and how can it affect a community's lake management goals? Explore the history of water level control in Wisconsin and, using specific case studies, review the value of this tool for meeting various water management objectives.

### **The Nuts and Bolts of Lake Management**

If you need information on the day-to-day operation of your lake organization, this stream is a must. From fundamental questions relating to the most appropriate organizational structure to the specifics of running a meeting and dealing with questions of liability and insurance, these sessions will provide indispensable information to participants.





## Stewardship Awards

The highest honor in Wisconsin lake stewardship is the Wisconsin Lake Stewardship Award. It is designed to recognize an individual or group's outstanding contribution of time and effort toward the well-being of Wisconsin's lakes and the community and natural life in and around the lake.

The Wisconsin Lakes Partnership has recognized these outstanding efforts for many years. There are five categories in which to acknowledge Wisconsin Lake Stewards:

(1) individual citizen, (2) organized group, (3) groups involved in the Adopt-A-Lake program, (4) public official or employee and (5) business.

Nominations must be submitted by March 12, 2004. For information regarding how to nominate, see <http://www.wisconsinlakes.org/stewardshipawards.htm> or call WAL at 608-662-0923.

Winners and nominees will be recognized during the Wisconsin Lakes Convention, April 15-17, 2004.

## Poster Session

There's still room to present your lake project or important information at the 2004 Wisconsin Lakes Convention! A poster session is being planned for Friday, April 16. Poster space is 4' x 8' and provided at no cost. Registration for one individual will be waived for Friday, and that person must be present at the poster during the poster session. Poster space is limited! Contact Amy Kowalski at 715-346-4744 or [akowalsk@uwsp.edu](mailto:akowalsk@uwsp.edu) to register your poster session.

## Photography Contest

UWEX, WDNR and WAL are sponsoring a photo contest! Here is an opportunity to show the state why you love your lakes as well as display your skill with a camera.

### Entry Categories:

1. People enjoying lakes
2. Natural features around and in lakes and under water

### Basic Rules: *See our website for detailed rules before entering!*

1. The contest is open to anyone.
2. Prints must be at least 8 inches by 10 inches, mounted, not framed or matted.
3. UW-Extension reserves the right to obtain an electronic or film copy of any image entered in the contest, for non-commercial educational or promotional use, with attribution to the photographer.

**Judging:** Photos will be judged by a 3-member panel. Criteria for judging include visual impact, technical merit and composition. Cash prizes will be awarded!

The prints will be displayed and judged at the Wisconsin Lakes Convention, April 15-17, 2004.

# REGISTRATION FORM

**26<sup>th</sup> Annual Wisconsin Lakes Convention - The Nature of Water**

**April 15-17, 2004**

**KI Convention Center /Regency Suites, Green Bay**

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Daytime Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_  
 Affiliation (Lake Org., etc.): \_\_\_\_\_ County: \_\_\_\_\_

<b>CONFERENCE</b>	Cost includes major meals, breaks and materials.	
	<b><u>Regular</u></b>	<b><u>Early Bird (before March 10)</u></b>
	<input type="checkbox"/> \$55	<input type="checkbox"/> \$50
	<input type="checkbox"/> \$70	<input type="checkbox"/> \$60
	<input type="checkbox"/> \$55	<input type="checkbox"/> \$50
	<input type="checkbox"/> \$170	<input type="checkbox"/> \$150
	<input type="checkbox"/> \$15	<input type="checkbox"/>
		Check for vegetarian meals <input type="checkbox"/>
<b>OPTIONAL WORKSHOPS</b>	See <a href="http://www.uwsp.edu/cnr/uwexplakes/conventions">www.uwsp.edu/cnr/uwexplakes/conventions</a> for more detailed descriptions. <b>Registration for these workshops closes April 5!</b>  Thursday evening, April 15 <b>Clean Boats, Clean Waters: Volunteer Watercraft Monitoring</b> (Limit: 25) This workshop will provide the materials and training to help volunteers set up a monitoring and watercraft inspection program. <input type="checkbox"/> \$25 (includes complete boat landing toolkit)  Saturday morning, April 17 <b>Aquatic Plants at the Root of a Healthy Lake Ecosystem</b> (Limit: 25) A hands-on approach to aquatic plant identification. Take this unique opportunity to learn and identify Wisconsin's common aquatic plants. <input type="checkbox"/> \$30 (includes aquatic plant collection kit and book)	
	<b>Conference Fee:</b> \$ _____ <b>Workshop Fees:</b> \$ _____  <b>Total Enclosed:</b> \$ _____  Payment method: <input type="checkbox"/> Check <input type="checkbox"/> Credit Card  Check one: <input type="checkbox"/> Visa <input type="checkbox"/> Mastercard Cardholder's Name _____ Card No. _____ Expires _____  You will receive confirmation and additional information upon registering.  <b>No refunds issued after April 10, 2004.</b>	

**Lodging information:** KI Convention Center/Regency Suites, 333 Main St., Green Bay, WI 54301 (800) 236-3330 or (920) 432-4555. Rates: \$91 double occupancy (\$20 for each additional person up to a maximum of 6); \$101 king double occupancy (\$20 for each additional person up to a maximum of 6). Price includes full breakfast and 2 hours of complementary beverages in evening. *Please refer to the Wisconsin Lakes Convention when reserving your room.* Nearby Holiday Inn: (920)437-5900.

**Mail this form with your check (payable to UW-Extension Lakes) or credit card information to:**  
 UWEX Lakes, UWSP/CNR, 800 Reserve St., Stevens Point, WI 54481 (715) 346-2116 [uwexplakes@uwsp.edu](mailto:uwexplakes@uwsp.edu)

# Self-Help Lake Monitoring Update

Self Help chemistry volunteers should be aware of changes in the procedure for submitting chlorophyll *a* samples to the State Lab of Hygiene. Just like last year, the lab will provide plastic tubes or vials for mailing used chlorophyll filters. This replaces the aluminum foil squares. Although volunteers may have received this tube in their returned fall sampling box, or may receive these tubes when they get their sampling supplies this spring, remember chlorophyll is only collected during the summer growing season. **Please DO NOT collect a chlorophyll sample during the spring sampling period!** If you are a chemistry volunteer and have any questions, contact your DNR regional volunteer coordinator.

The lake database <https://dnrx.wisconsin.gov/x10322/> continues to expand beyond just volunteer-collected data. This spring, water quality data collected through lake grants will be uploaded and available alongside volunteer-collected data. Consultants and lake organizations will be able to check for data collected through grants that are using the State Lab in about a week or two after the lab has completed the analysis. In the past, this data had to be accessed through the regional lake coordinator. Providing web access to this data cuts out this middle step and will provide quicker and broader use of this information.

Thank you to all our volunteers! For more information on Self Help, see <http://dnr.wi.gov/org/water/fhp/lakes/selfhelp/index.htm> or contact Jennifer Filbert at 608/264-8533.

*Self Help chemistry volunteers collect data to assess a lake's health.*



## Invest In Wisconsin's Lakes

We know that our lakes are under pressures from many sources. We don't have many of the answers on how to protect them or even what exactly are the affects of human impacts. We do know that if you remind the person that sells you your fishing license or boat registration that you would like to give a dollar for lake research it will make a big difference in protecting our lakes. Look for the new *Invest in Wisconsin Lakes* poster when you buy your license or boat registration and ask your clerk to check YES for Lake Research.



# A 10,000 Year The Lakes and the Land... How are they getting along? Relationship

*10,000 years ago the glaciers finished shaping much of Wisconsin's land surface. As they melted and receded, many lakes were created from the blocks of ice, glacial streams and deposited rubble. So after one hundred centuries, how are these lakes and the land surrounding them getting along?*

The lakes and land are connected through the movement of water. On average, in Wisconsin, we receive the equivalent of two and one-half feet of rain each year. That figures out to Wisconsin being soaked by more than five miles of rainfall since the glaciers melted. Probably two-thirds of that water was taken up by plants or returned directly to the atmosphere, but the other one-third has made a journey with tremendous impact on our lakes.

Gravity forces water on a downward journey into the ground and through drainage paths until the water reaches its ultimate destination, the ocean. Much of Wisconsin is more than one thousand feet above sea level. As water moves downhill, some of it travels through our lakes on its way.

It is during the water's journey that important changes take place. The land through which this water passes contains thousands of pounds of naturally occurring chemicals such as calcium, carbonate and phosphorus in soil and rock. Water is naturally acidic and contains few minerals when it falls as precipitation. As it enters the ground it begins to slowly dissolve the soil and rock. The mineral content of water can be increased more than 100-fold after the water has moved only a few meters.

## **Life Would Be Different**

If the water did not interact with the land, life for humans and animals would be very different. For example, the water you pump into your lake home likely has acquired minerals such as calcium and iron from dissolving soil and rock in the ground. While calcium may seem a nuisance when it deposits on plumbing fixtures, it is crucial for animals and plants. Groundwater moving slowly beneath your home might bring

*The mineral content of water can be increased more than 100-fold after the water has moved only a few meters.*



*Lakes and Land...it's all connected!*

hundreds of pounds of calcium (in its dissolved form) to a nearby lake each year. Carbonate is also added to the water when rocks dissolve. Dissolved minerals, such as calcium, that are transferred to lakes help sustain aquatic life. They are incorporated into plants and animals. The carbonate increases the water's resistance to acid rain. The amount of available calcium and carbonate, and the rate that they dissolve, varies in different portions of the state and even in water entering different parts of the same

*Continued on page 10*



*Lake Tides 29(1)*

lake. Studies have shown that even low levels of dissolved minerals from the land are important to lakes.

Dissolved minerals, such as calcium, that are transferred to lakes help sustain aquatic life. They are incorporated into plants and animals.

*One of the most dramatic changes to the lake/land relationship has been the alterations to the landscape around lakes.*

### **Stingy Land**

For some chemical elements, the transfer from land to the passing water is a slow process. For example, the land can appear reluctant to release important nutrients such as phosphorus. Natural systems rely on this essential element for energy, but typically, little new phosphorus is added to the land each year from dissolving rock. Studies have shown how natural systems cope. Rather than give up available phosphorus to passing water, plants and microorganisms intensively recycle the phosphorus.

A New Hampshire study found more than 100 pounds of phosphorus incorporated in the plants and soil on an acre of wooded land, but each year less than one tenth of one percent was removed by passing water. Phosphorus is held in the upper soil layers by scavenging microorganisms, plants and reaction with soil. It is retained long enough to be recycled by growing plants. The benefit of this recycling to the land is clear, because the loss of large quantities of phosphorus to passing water would quickly deplete the land of this important nutrient. This also benefits lakes because the transfer of large quantities of phosphorus to a lake can increase biological production, reduce water quality by excessive

algae growth which reduces clarity and oxygen levels.

### **A 10,000 Year Relationship**

If lakes and the land have been together thousands of years, why is there concern now that this relationship isn't as "good" as it once was? While some things haven't changed—Wisconsin still receives two and one-half feet of precipitation each year, water still flows "downhill," and although the land has lost some minerals to passing water over the years, it still contains many tons of important and useful compounds—some critical changes have taken place that greatly impact the relationship.

One of the most dramatic changes to the lake/land relationship has been the alterations to the landscape around lakes. Driveways, rooftops and compacted soils near the shore of a lake reduce the amount of water that seeps into the ground and increases the amount of water that moves over the land. Tree removal allows more water to hit the ground and potentially become runoff, and many lakefront lots are shaped to direct water to the lake quickly. These changes have altered the pathways that the water takes from land to lake.

When water is redirected across the land surface and no longer seeps into the ground, it will acquire different materials. The water can now carry small particles of vegetation and sediment with it. Where these compounds would have previously been filtered out and retained in the upper portions of the soil, they can now be transferred more rapidly downhill, and eventually enter the

*Continued on page 11*

### **Let this sink in...**

- **Vegetate slopes and buffers**
- **Break up slopes to slow water**
- **Obstruct water flow with ridges and depressions**
- **Spread out the water to slow it down**
- **Encourage infiltration by reducing/preventing compaction**
- **Direct water to areas where it will infiltrate**
- **Limit impervious areas**



lake. Such changes can also be observed when researchers examine sediment accumulations in the bottom of lakes. The phosphorus that is carried into the lake can continue to be used biologically, but now it cycles in the lake, not on the land, causing increased algae and plant growth.

### What Can We Learn?

What can we learn from the long relationship between our lakes and the land? Much of the water entering our lakes each year has passed through the land; however, the composition of that water depends on the path it takes. When water is directed over land and not allowed to infiltrate, it can deliver more phosphorus and sediment to the lake in a shorter period of time. You can take steps to help maintain or restore water quality in the lakes. Slowing the transfer of phosphorus and sediment to the lake is one way to do this.

Take a look at the land around your lake home. Slowing the transfer of phosphorus and sediment to the water requires carefully considering how water is moving near your shore. Direct runoff into areas where it can infiltrate and slow the movement of phosphorus and sediment. Because lakes are down-

hill from the land, it is not always easy to prevent the water from running directly across the land and into the lake, especially when we get a lot of rain or the ground is frozen. Where runoff is likely, look for ways to slow the water and encourage infiltration. Vegetated buffer areas near the lake that slow water and foster infiltration are a good start, but also look further uphill. Are there ways you can reduce the amount of water that enters the buffer? Limiting the amount of impervious area and reducing compaction of soil will reduce runoff and increase infiltration.

*Our actions today impact how our lakes and land get along. 10,000 years from now, after another several miles of water have passed from land to water, how will our lakes and land be getting along?*

For a more detailed version of this article, including footnotes, please go to our website at [www.uwsp.edu/cnr/uwexplakes](http://www.uwsp.edu/cnr/uwexplakes) and click on *Lake Tides*.

*By Paul McGinley  
UW-Extension Water Quality Specialist, UW-Stevens Point  
paul.mcginley@uwsp.edu*

*If lakes and the land have been together thousands of years, why is there concern now that this relationship isn't as 'good' as it once was?*

## CALENDAR

**February 12-13, 2004 - New Tools for Water Quality in the Fox/Wolf Basin** - see [www.fwwa.org](http://www.fwwa.org) for info.

**February 15, 2004 - Deadline for River of Words K-12 Poetry and Art contest.** See [www.uwsp.edu/cnr/uwexplakes/row](http://www.uwsp.edu/cnr/uwexplakes/row) for information.

**February 21, 2004 - Profitable Forests-Discovering and Promoting Your Woodland Assets.** Woodland School's landowner conference. Wisconsin Dells. 608/355-0279 or [tours@aldoleopold.org](mailto:tours@aldoleopold.org) for info.

**March 12, 2004 - Deadline for Wisconsin Lakes Partnership Stewardship Awards** - See [www.wisconsinlakes.org](http://www.wisconsinlakes.org) for award criteria and directions. Award winners will be named at the 26th Annual Lakes Convention.

**April 4, 2004 - Deadline for the Wisconsin Lakes Partnership Photography Contest** - Details on-line at [www.uwsp.edu/cnr/uwexplakes](http://www.uwsp.edu/cnr/uwexplakes). The prints will be displayed and judged at the 26th Annual Lakes Convention.

**April 15-17, 2004 - Wisconsin Lakes Convention** - See pages 1-7 for details.



Volume 29, Issue 1  
Winter 2004

IN THIS ISSUE

2004 Wisconsin Lakes Convention.....	1
Program Agenda.....	2-3
Session Descriptions.....	4-5
Photography Contest.....	6
Stewardship Awards.....	6
Poster Sessions.....	6
Registration Form.....	7
Self-HelpLake Monitoring...	8
Invest in WI Lakes.....	8
A 10,000 Year Relationship....	9
CALENDAR.....	11

Printed on recycled paper with soy ink.



Wisconsin Lakes Partnership

Published Quarterly

Internet: <http://www.uwsp.edu/cnr/uwexplakes/>  
E-mail: [uwexplakes@uwsp.edu](mailto:uwexplakes@uwsp.edu)  
Editors: Mary Pardee, Robert Korth  
Design Editor: Amy Kowalski  
Contributing Editor: Carroll Schaal, DNR  
Photos by: Robert Korth  
Illustrations by: Carol Watkins, Chris Whalen

The contents of *Lake Tides* do not necessarily reflect the views and policies of UW-Extension, UWSP-CNR, the Wisconsin DNR or the Wisconsin Association of Lakes. Mention of trade names, commercial products, private businesses or publicly financed programs does not constitute endorsement. *Lake Tides* welcomes articles, letters or other news items for publication. Articles in *Lake Tides* may be reprinted or reproduced for further distribution with acknowledgment to the Wisconsin Lakes Partnership. If you need this material in an alternative format, please contact our office. No state tax revenue supported the printing of this document.

## Reflections

**T**here is nothing like walking to get the feel of a country. A fine landscape is like a piece of music; it must be taken at the right tempo. Even a bicycle goes too fast.

-Paul Scott Mowrer

