

Cultivating Environmental Stewardship in the Lakeshore Region

MEMBERSHIP

CONTACT US

The Source

Inside This Issue

- [A Message from the Executive Director](#)
- [Champions of Conservation Program](#)
- [Community Grant Program 2009](#)
- [Spring 2009 Champions of Conservation Awardees](#)
- [Lake Michigan Bluff Processes](#)
- [Stop Global Warming](#)
- [Barn Dance](#)

A Message from the Executive Director

Dear Friends of LNRP:



We hope that you've been enjoying the summer weather and experiencing the wonderful and special places of the lakeshore basin!

We have good news to report.

LNRP has continued to enjoy great success with recent grants and contracts. LNRP recently received a second grant from the West Foundation to support the collaboration with the Water's Edge Artists. Just this month, LNRP received a DNR River Planning Grant that will allow for the formation of a "Friends of the Pine" a tributary of the Manitowoc River currently undergoing PCB removal. The same grant will support work with Friends of the Branch, a long-standing citizen based group working towards promoting the conservation and preservation of the Branch River. LNRP is working with

the Village of Cleveland to restore the abandoned millpond and expand Hika Park located on the shores of Lake Michigan. LNRP continues to provide Environmental Management System training to area dairy farmers. LNRP is one of the core team members of a State Innovation Grant awarded through the DNR. The work fulfills the mission of the Agricultural Watershed Improvement Network to "improve drinking and surface water quality through enhancing environmental, community, and economic aspects of agricultural operations."

This fall, LNRP will be hosting our Fall 2009 Champion of Conservation Award Program and our 2009 Community Grant Program. This year, our Community Grant Program is being funded by a challenge grant provided by Dominion. If you haven't already contributed, please consider a donation that will be matched dollar for dollar to double your impact!

If you have not become a member, please consider becoming a member today. Your tax-deductible contribution goes directly to protecting and restoring the waterways of the Lakeshore Basin.

[Top](#)

Lakeshore Champion of Conservation Award Program

Summer 2009



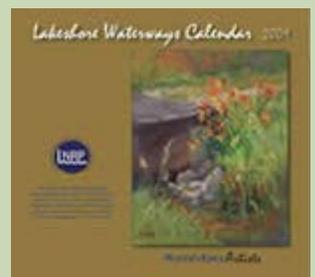
News from LNRP

- [PRE-ORDER 2010 LAKESHORE WATERWAYS CALENDAR](#)
- [EXPLORE & RESTORE EVENTS](#)
- [EVENTS CALENDAR](#)

Events Calendar

- [LAKESHORE WATERWAYS EXHIBIT](#)
- [PADDLING PAST YOUR HORIZONS](#)
- [CRAFTY APPLE FEST](#)
- [5TH ANNUAL FALL FOOD & ENERGY FESTIVAL](#)

Pre-Order 2010 Lakeshore Waterways Calendar



The Lakeshore Natural Resource Partnership (LNRP) and Dominion (NYSE: D), owner of the Kewaunee Power Station, are proud to announce nominations are now being accepted for the Fall 2009 Lakeshore Champions of Conservation Awards.

The environmental award program recognizes and honors the outstanding environmental initiatives throughout Northeastern Wisconsin. The award seeks to pay tribute to those that have demonstrated a commitment to environmental excellence, leadership, and accomplishment in their respective field.

By sponsoring these awards, LNRP and Dominion hope to encourage our communities to emulate the achievements of the successful nominees, thereby promoting innovative environmental efforts and enhancing the quality of life in the Lakeshore Basin.

The awards are open to any group, program, organization, business, or individual located and working in the Lakeshore Basin. Nominations can be made by the person or people involved in the activity or by a third party. Deadline for nominations is September 11, 2009.

Award nominees should focus on one of the following three areas of concern:

Water Resources Protection: Projects that monitor or improve streams, rivers, lakes or wetlands. Also, projects to improve access to public waterways for passive, water-related recreation.

Environmental Education and Outreach: Projects that establish or improve communication and education about basin environmental issues for the general public, youth and stewardship programs.

Land Use Protection and Habitat Restoration: Projects that focus on improving land development decisions to restore or protect natural areas.

LNRP uses community-based Selection Committees to determine the champions. Selection Teams are composed of knowledgeable volunteers from throughout the Lakeshore Basin including natural resource professionals, scientists, teachers and leaders of environmental organizations.

The selected awardees will be notified by LNRP and invited to an award reception scheduled for mid-November, 2009. The final Champion of Champions will receive a monetary award of \$2000 to be donated to the local non-profit organization of their choice.

The reception will also be the venue for the *We All Live on the Water* seminar series. The series brings speakers that can reflect on timely and topical issues impacting the Wisconsin watershed flowing into Lake Michigan.

For [nomination forms and further information](#) go to the LNRP website at www.lnrg.org.

[Top](#)

Community Grant Program

LNRP will offer grants for projects that focus on water quality.

The Lakeshore Natural Resource Partnership, Inc. (LNRP) will award grants to non-profit organizations working to preserve, promote and protect the water quality in the lakeshore basin, the watershed that includes Door, Kewaunee and Manitowoc counties and the eastern parts of Brown and Calumet counties. Grants will range in size from \$500 to \$5,000.

Funds are being made available by Dominion (NYSE: D), owner of the Kewaunee Power Station. Dominion is offering \$20,000 as a challenge grant to other businesses, foundations, and individuals where each dollar donated to the community grant fund will be matched with an overall target of \$40,000.

Organizations eligible to compete for grants are grassroots groups with limited revenue located in the lakeshore basin. Applications are due by September 4th, with funding decisions made in late October.

LNRP seeks to promote wise stewardship of ground and surface waters, forests, soils, wildlife and habitat. It does this by fostering community partnerships, making grants, and offering other assistance to projects designed to protect and improve the watershed.

Grant proposals should focus on water quality issues in one of the following three areas of concern:



A very accomplished group of artists have created the Water's Edge Artists group and worked with the Lakeshore Natural Resource Partnership (LNRP) to develop the annual Lakeshore Waterways Calendar.

This year, thirteen paintings will be selected from submissions of rivers, streams, wetlands, and lakes in the Lakeshore Basin. The project began in the autumn of 2006 when the LNRP met with a number of painters who share a method called plein air (literally, painting in the open air). Plein air painters paint from life using all of their senses to capture the light and colors particular to a place. From the first meeting, the Water's Edge Artists developed a logo and their mission statement:

WATER'S EDGE Artists

The Water's Edge Artists is an alliance of plein air artists dedicated to the conservation and protection of water resources in the Lakeshore Basin of northeastern Wisconsin. Through collaboration with the Lakeshore Natural Resource Partnership, our efforts reflect the shared passion for preserving the local fragile environments of our watersheds.

The Water's Edge Artists have chosen prominent and otherwise overlooked creeks, streams, lakes, rivers and wetlands to feature in their paintings. The calendar hopes to capture the essence of these important places through the painters' direct contact with nature. This project will add to a series of efforts through our "We All Live on the Water" campaign designed to generate a stewardship ethic across the Lakeshore Basin.

[Visit the Water's Edge Artists website.](#)

[Pre-order your 2010 Lakeshore Waterways Calendar.](#)

[Top](#)

Explore and Restore Events A Huge Success!

As part of a DNR River Planning Grant, Woodland Dunes Nature Center, the Wisconsin Maritime Museum, UW Extension, and the Lakeshore Natural Resource Partnership hosted a series of events on the waterways of Manitowoc County.



On May 2, a group was led by Dr. Charles Sontag on a short hike through Silver Creek Park to Lake Michigan discussing the importance of a healthy river to the wildlife that inhabit the park. Early spring flowers and migrating birds along the lakeshore were some highlights of the afternoon.



- **Water Resources Protection:** Projects that monitor or improve streams, rivers, lakes or wetlands.
- **Environmental Education and Outreach:** Projects that establish or improve communication and education about water quality issues for the general public, youth and stewardship programs.
- **Land-Use Protection and Restoration:** Projects that focus on improving land development decisions to restore or protect water quality.

LNRP has created Grant Advisory Teams in each of the three areas of focus above. These teams of volunteers assist organizations in developing their proposal and also make funding recommendations to the LNRP board of directors. Grant advisory team members are environmental professionals and dedicated citizens with substantial qualifications and a passion for the lakeshore basin environment.

Organizations interested in applying for a grant or learning more about LNRP should visit our website at www.lnrp.org where grant guidelines, instructions, and sample applications are available. Also on the website are project highlights from previous grant rounds. Additional information is available from Executive Director, Jim Kettler at jim@lnrp.org

[Top](#)

Awardees

LNRP and Dominion Select Spring 2009 Champions of Conservation

The Lakeshore Natural Resource Partnership and Dominion, owner of the Kewaunee Power Plant, hosted the Spring 2009 Lakeshore Champions of Conservation Awards Ceremony on Thursday, June 4, 2008 at the Bay Beach Wildlife Sanctuary in Green Bay.

The environmental award program honors the outstanding achievements of groups, programs, organizations, businesses or individuals in a wide range of environmental initiatives throughout Northeastern Wisconsin. The award seeks to pay tribute to those that have demonstrated a commitment to environmental excellence, leadership, and accomplishment in their respective fields.

The Champion of Champions went to Russ Tooley of Centerville Cares. The Water Resources Protection Award went to Carol Entringer of the Manitowoc Lakes Association. Armond Kueter represented Conservation Education, Inc. in receiving the Environmental Education and Outreach Award. For Land Use Protection, the award was given to the Brown County Chapter of the Izaak Walton League represented by President, Jodi Arnet.



Champions Russ Tooley, Jodi Arnet, Carol Entringer, Armond Kueter at Bay Beach Wildlife Sanctuary

Each award recipient received a recognition plaque and a small donation to the non-profit of their choice. As the Champion of Champions, Russ Tooley was honored with a donation of \$2,000 that he dedicated Centerville Cares and their continuing efforts to improve water quality.

[Top](#)

Lake Michigan Bluff Processes

Lake Michigan Bluff Erosion Processes

Andy Wallander, LNRP Board Member

Bluff erosion along the Lake Michigan shoreline is a natural process. However, our activities, such as overdevelopment pressure and intensive agricultural use, can influence the process, causing erosion to either accelerate (such as by increasing the rate and volume of stormwater runoff) or decelerate (such as by the construction of shore protection measures). Because bluff slope stability is influenced by a number of dynamic factors, slope failure is a process that occurs in an abrupt, unpredictable, fashion as opposed to a uniform, relatively stable continuous fashion. After each incremental slope failure, the soil mass tends to temporarily assume a stable configuration until the net effect of the many influencing factors decreases slope stability, thus precipitating another incremental failure. The more we understand these processes, the more mindful we will be in our land use decisions.

BLUFF EROSION

While some Lake Michigan bluffs do incorporate bedrock formations within their structure, making them extremely resistant to the erosive forces of wind, waves and runoff, the bluffs in Northeastern Wisconsin are composed of unconsolidated sediments, primarily sands, and silts, that tend to slough off in



The group collaborated with the Lakeshore Paddlers for a paddle down the East Twin River on May 9. Starting at Mishicot dam the participants were able to enjoy a beautiful stretch of the river before ending their trip at Paddlers Park in Two Rivers.

The third event occurred on May 30 with a hike through the Drumm Memorial Forest to Maribel Caves. The spring wildflowers, bird songs and garlic mustard kept the group busy along the hike. Tests of the nitrate and phosphate levels of the river were eye opening, both testing high for these nutrients. A tour of the caves and discussion of groundwater issues ended the excursion.

Collins Marsh was visited by 35 paddlers in 15 canoes and 1 kayak on the morning of June 13th. Collins Marsh Naturalist Terry Paulow, introduced the group to a variety of marsh wildlife, including osprey, redwing blackbirds, yellow headed blackbirds, great blue herons, and many more. After the paddle, he gave a presentation on the birds of Collins Marsh and then took the group on a climb of the observation tower to get a birds-eye view!

[Top](#)

Barn Dance

Please Join Us in Partnering for Progress and Celebrating our Rural Communities!



Agriculture, food production, and farming are integral to Wisconsin's social and



shallow layers. Bluff erosion can occur in the form of toe erosion, slumping, sliding, flow, surface erosion, and solifluction or fluidization, resulting in the intermittent, recession of the bluff.

On all slopes, gravity creates shear stresses which act to move material on the slope to a lower elevation. The shear stress forces acting on the materials in the bluffs are primarily determined by the

weight of the soil and the water mass in the bluff, water pressures in the bluff, and external loads such as buildings, machinery and vibrations. Bluff materials have a shear strength which, in stable slopes, is greater than shear stresses. The shear strength depends on the properties of the soil and the moisture content, which is, in part, determined by soil drainage. Bluffs fail when either the shear stress is increased or the shear strength decreased, altering the balance of forces until the stresses exceed the resisting soil strength.

On most slopes which are undisturbed by humans an equilibrium between the forces acting to move material down the slope and the resistance of the materials in the slope to those forces, is established over a relatively long period of time.

TYPES OF SLOPE FAILURE

One major type of slope failure is sliding. In this type of failure, the material generally moves along a single slide plane. The two forms of slides common along our lakeshore areas are translational slides, and rotational slides (or slumps). Translational slides involve a surface layer several inches to a few feet thick, sliding parallel to the face of the slope. Translational slides can occur either rapidly or slowly. Rotational slides, in contrast, often involve the slumping or sliding of a fairly large mass along a curved plane. The slide mass rotates, and often the top of the slump block is tilted back toward the slope face. Slumps usually take place suddenly and can cause extensive damage since they can result in a large recession of the bluff.

A second major type of slope failure is flow, or fluidization. With this kind of slope failure, large amounts of soil water is present and the soil mass actually liquefies and moves like a fluid. Some flow commonly occurs at the toe of slump blocks during and relatively soon after a sliding failure. Since slump blocks rotate such that the top of the block is often tilted back toward the bluff, surface water can accumulate in these depressions and saturate the underlying soil. Flows also occur when intense rains saturate the surface layer of soil, or in the spring as intergranular ice melts near the soil surface. Flows can also occur where groundwater discharges along the bluff face through layers, or lenses, of silt or fine sand. If these more permeable soil layers are located between less permeable clay layers, removal of sediment by flow due to groundwater seepage, referred to as sapping, can occur, and cause undercutting which creates an unstable slope subject to slumping and sliding.

A third type of slope failure, related to flow, is solifluction. Solifluction is the slow, viscous downslope flow of water-saturated soil over an impermeable base. Solifluction is often caused by freeze-thaw activity. During the thawing period, there is a buildup of excess pore water pressure within the soil mass. Because of underlying impermeable frozen ground, the pore pressures cannot be dissipated and, thus, shear resistance decreases. Also, the growth of ice crystals within the soil during winter months weakens the structure of the soil. The amount of moisture in a soil prior to freezing will affect the shear strength after it has thawed; the higher the moisture content before freezing, the greater the reduction in shear strength after thawing. The net result is a shear resistance, or strength, which is less than the shear stress; therefore, even gentle slopes may fail. Solifluction can also occur in unconsolidated material which overlies impermeable bedrock.

A fourth type of slope failure is sheet wash, and rill and gully erosion. Both sheet wash, and rill and gully erosion result from surface water runoff flowing over the top of the bluff, and over the slope face itself. Sheet wash is the unconfined flow of water over the soil surface during and following a rainfall. Depths of flow are generally less than one-tenth of an inch, and raindrop impact is the dominant factor in the detachment of soil particles. Once the particles are detached, they are transported downslope at a rate determined by the water runoff rate, slope steepness, vegetative cover and roughness of the surface, and by the transportability of the detached soil particles, which is a function of particle size and density. In contrast to sheet wash, rills and gullies are formed by the channelized flow of water over the soil surface. Rill and gully formation tends to follow zones of weakness established by desiccation (drying), cracking, and differences in soil expansion due to the cycles of freezing and thawing, and wetting and drying. On the lake bluffs, the rills are generally destroyed over the winter months by freeze-thaw activity and solifluction, whereas gullies may exist for years.

[Top](#)

Stop Global Warming

League of Conservation Voters define priorities for 2009-2010

In the last LNRP newsletter, we shared an issue brief on protecting Wisconsin's drinking water. This is one of four of the Conservation Priorities selected by the League of Conservation Voters through listening sessions held throughout the State.

economic well-being. We invite you to join us in celebrating our rural heritage and way of life. We have much to celebrate! This year the State budget contains funding for the Wisconsin Working Lands Initiative – a program designed to preserve agricultural and forestry lands. These lands are vital to a strong land-based economy and strong rural communities.

The Lakeshore Natural Resource Partnership (LNRP), the Council of Rural Initiatives (CRI—successor to Future of Farming and Rural Life study), Gathering Waters Conservancy, UW Extension, and the Saxon Homestead Farm are partnering to showcase the value of working lands, recognize the need for environmental stewardship, and explore what needs to happen to improve our rural quality of life.

As part of a collaborative fundraiser for LNRP, CRI and Gathering Waters, you are invited to support our efforts by attending what is sure to be a fun and exciting event. We are hosting an old-fashioned barn dance at a wonderfully restored and antique-packed hay barn with the lively King Comets band providing swing and zydeco tunes to energize our celebration. Here are the details for this black tie and blue jeans bash.

- Saxon Historical Heritage Center
- 15621 South Union Road, Cleveland, WI 53015 ([map](#))
- Saturday, September 26, 2009; 5:00 to 10:00 pm
- Locally Sourced Food Buffet and Refreshment Bar

For more information and to get your letter of invite to this special event, please contact Jim Kettler at jim@lnrp.org or 920-304-1919.

[Top](#)

Events Calendar

Lakeshore Waterways Exhibit
September 28 through November 8
Rahr-West Art Museum in Manitowoc

LNRP will host the Lakeshore Waterways Exhibit in collaboration with the Water's Edge Artists at the Rahr-West Art Museum in Manitowoc. A reception with the artists will be held from 1:00 to 4:00 p.m. on October 11. The exhibit showcases works that appear in the Lakeshore Waterways 2010 calendar as well as other works by the artists.

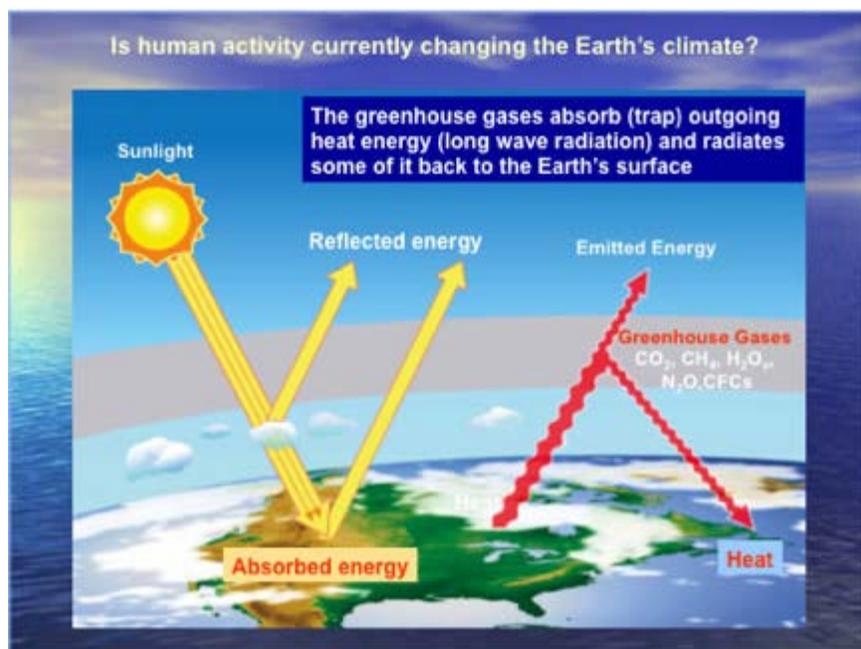
[Top](#)

Padding Past Your Horizons
August 19, 2009, 7:00 pm

A presentation featuring ultimate long-distance canoeist, Valerie Fons, who once made a 28,000 mile canoe trip

Other priorities include preserving groundwater, restoring conservation integrity by moving the appointment of the Department of Natural Resources Secretary to the Natural Resources Board, and protecting Wisconsin's drinking water. In this issue, we're sharing the issue brief on stopping global warming.

Stop Global Warming in Wisconsin



(adapted from Wisconsin League of Conservation Voters Priority Briefs)

Global warming is an urgent threat to Wisconsin's environment, public health and economy. A changing climate - with more storms, heat waves, droughts and floods - will wreak havoc on our farms, lakes, forests and wildlife. In addition, increases in temperatures will lead to more smog in our urban cities, making childhood asthma and other heat-related illnesses more prevalent.

Wisconsin's dependence on old, dirty energy sources like coal and oil have put us far ahead of the national average in the amount of global warming pollutants we emit. In fact, since 1990, Wisconsin's global warming pollution has increased 25%.

Wisconsin citizens enthusiastically support tackling the threats of global warming because, in our state, the threats easily translate into unique opportunities for economic growth. Wisconsin car manufacturers can lead the nation in producing fuel-efficient vehicles. Wisconsin innovators can create the model for the best new conservation measures. Wisconsin businesses can develop the techniques to best utilize all energy sources. And, Wisconsin can make these changes early, so other states will follow our lead. Better yet, as scientists guarantee, these early changes will have the greatest long-term benefits for the climate itself.

Stopping global warming means more than generating energy from clean, homegrown sources like wind and solar power. It means saving consumers money on their gas and heating bills. It means bolstering our research and manufacturing base. And it means creating thousands of new jobs in Wisconsin to develop and install these technologies. With the proper leadership, Wisconsin will thrive in the new energy economy.

Solution

To stop global warming, legislators must adopt a science-based plan to reduce Wisconsin's global warming emissions, while at the same time, creating a clean energy economy. This session, legislators must enact legislation that will:

1. Increase Wisconsin's commitment to utilizing clean, renewable sources of energy to 10% by 2013, 20% by 2020, and 25% by 2025;
2. Reduce energy usage by 2% per year, by requiring more energy efficient appliances, improved building codes and statewide energy efficiency programming;
3. Promote the next generation of high efficiency vehicles by adopting clean cars and low carbon fuels policies;
4. Place great emphasis on immediate measures to reduce global warming emissions by mandating early reductions over larger ones later;
5. Create a cap and trade program to provide market incentives for companies to reduce their emissions.

Results

Stopping Global Warming in Wisconsin will:

- Invigorate Wisconsin's economy by creating good-paying, new jobs and fostering the opportunity for our state to become a leader in innovative technologies nationwide;
- Reduce Wisconsin's dependence on foreign oil by creating abundant renewable energy sources such as solar, wind, and bio-fuels;
- Protect the quality of life for Wisconsin's current and future citizens by allowing farms, businesses, and to avoid the worst consequences of global warming.

[Top](#)

from the Bering Sea to Cape Horn in 33 months. Sponsored by the Door County Environmental Council, Baileys Harbor Town Hall, 2392 Cty F at Hwy 57, Baileys Harbor, WI. Information at www.dcec-wi.org or (920) 743-6003.

[Top](#)

Crafty Apple Fest

September 12 from 9:00 a.m. to 4:00 p.m.

Enjoy a day of fun at Chilton's Crafty Apple Fest, a one-day celebration featuring crafts, food, live music and fund for the entire family. Hwy 32/57 & Park Street in Chilton. For more information, call 920-418-1650 or visit www.chiltonchamber.com

[Top](#)

5th Annual Fall Food & Energy Festival

Saturday, September 12 from 9:00 a.m. to 4:00 p.m.

The 2009 Fall Food & Energy Fest will bring people from throughout Northeast Wisconsin to explore sustainable and practical solutions to our environmental challenges. Activities and exhibits include a mushroom hike, a farmer's market, energy savings in the home, renewable energy resources, cheese carving and more. Located at the Ledge View Nature Center, W2348 Short Road in Chilton 1 mile south between Hwys. 57 & G.

For more information go to ledgeviewnaturecenter.org

[Top](#)

Want to donate ?

I would like to make a tax deductible donation.

[Donate](#)



P.O. Box 62 Sturgeon Bay, WI 54235 • © 2009 [Lakeshore Natural Resource Partnership, Inc.](#)
© 2009 [Wisconsin Web Writer, LLC](#)
All Rights Reserved