Run Off with the Facts

An Introduction to Wisconsin Stormwater Regulations

More rooftops, more driveways and more streets can mean more rain running off the land. Is that bad for lakes? Is this runoff regulated? These are questions being asked as development increases around lakes. Let's look at how runoff, often called stormwater, can affect lakes, as well as some of the new stormwater regulations that apply to residential development in Wisconsin. The information here is a general introduction to the rules and does not cover all of the requirements. Interested readers should review the entire Wisconsin Administrative Code NR 151 - Runoff Management.

The Basics

Wisconsin lakes

for people interested in

The newsletter

Stormwater is the rain that runs off land because it cannot enter the ground as fast as it falls. We have probably all observed this water running along streets or off of roofs, but you may be surprised to learn how much stormwater can be generated. For example, a single 2 $\frac{1}{2}$ inch storm on a 2,000 square foot roof can generate more than 3,000 gallons of water. Over the course of an average Wisconsin year, that single roof can generate almost 40,000 gallons of water.

From a lake's perspective, the water in rain (and snow) is very important. Without new water to replace the water that drains to streams or flows over dams, lake levels would fall. In Wisconsin, much of this new water comes from rain and snow throughout the watershed. It infiltrates the ground and then travels to lakes and streams through the groundwater. Stormwater can short-circuit this path and deliver a lot of water to the lake in a short period of time. This stormwater carries sediment and nutrients such as phosphorus that would otherwise be removed. More nutrients and sediment mean more algae and plants in the lake. While some of these are necessary for a healthy lake, too much means greener water, lower oxygen and other undesirable changes.

Managing High Flows

The earliest attempts to manage stormwater focused on the flooding associated with large storms. Stormwater regulations usually require that the peak (high) flow that occurs from a large storm not exceed that which occurred prior to development. Of course, measurements are not usually made before and after the change, but designers estimate the peak flow likely before and after development. They base these calculations on single, infrequent storms, such as those likely to occur once every two, ten or even one hundred years.

From the lake's perspective, reducing the peak flow from large storms is very important. These high flows can carry sediments and nutrients from soil and vegetation directly to the lake. However, if a pond or detention area is used to slow the movement of water, it may not reduce the overall stormwater volume. If the stormwater volume is not reduced, there will still be more sediment and nutrients travleing to the lake than before development. Fortunately, other Wisconsin stormwater requirements also try to address the increased sediment and runoff volume.

(Continued on page 2)

Volume 31, No. 4 Fall 2006 Wisconsin Lakes Partnership

Controlling Runoff Volume

When rain falls on undisturbed land, much of it infiltrates into the ground. This infiltrated water is available for plant use and can move down to the groundwater. The water quality is improved when sediment and nutrients are removed as the water percolates through the soil. Perhaps most importantly, infiltration reduces the volume of water that leaves the land as stormwater runoff. The new Wisconsin stormwater regulations require that some of the runoff generated from development be infiltrated. This is a new approach to regulating stormwater that tries to mimic the movement of groundwater and filtration that occurs naturally.

The regulations require residential projects that disturb more than one acre to maintain almost the same amount of infiltration before and after development. Specifically, the designer is required to infiltrate at least 90% of the water that previously infiltrated. In contrast to the single large storm approach of the peak flow rules, the infiltration requirement looks at all of the storms during a typical year. In Wisconsin, that means designers must consider the more than 100 rain storms, most of them small, occurring in the average year. There are a variety of approaches available to infiltrate this stormwater, including such things as rain gardens.

Removing Pollutants from Runoff

The movement of runoff across rooftops and roadways results in stormwater becoming contaminated with sediment and nutrients. Another requirement of the new stormwater regulations is removal of sediment from the stormwater. For development that disturbs more than one acre, methods must be installed that would remove 80% of the sediment before the water is released. Because sediment is denser than water, one of the approaches to this treatment is to pass the stormwater through a pond and allow the particles to settle to the bottom. Periodically, the pond would be cleaned to remove and dispose of the sediment.

Challenges

Development around lakes always poses a risk that nutrients and sediment on the land will be more quickly transported to the water through increased stormwater runoff. Fortunately, there are many techniques available to reduce the volume and improve the quality of stormwater runoff and thereby reduce the impact to lakes. While the new Wisconsin regulations begin to address stormwater, some challenges remain.

One of the challenges to lakes is that the regulations do not apply to all development that occurs within a watershed. If the disturbed area is less than one acre, it may still generate runoff, but it may not be covered by the new regulations. Of course, designers and builders can still incorporate stormwater management into the construction. A related challenge is that it is not always clear how the regulations will apply to single lots that are part of larger developments. If land in the development is subdivided and then individual lots disturb less than one acre, each lot may not have to meet infiltration or treatment requirements.

Wisconsin stormwater regulations require that some of the runoff generated from development be infiltrated. Another challenge to protecting lakes is that the regulations allow some exemptions from the requirements when the infiltration rate is slow, or the area for infiltration requires too much land. In those cases, the increased runoff volume will most likely increase the sediment and nutrients delivered from the site.

Finally, the regulations do not specifically address nutrients such as phosphorus. Many Wisconsin lakes will have poorer water quality if phosphorus levels increase. Fortunately, the regulations indirectly address nutrients by reducing runoff volume and sediment loading to the lakes; however, just meeting the regulations does not eliminate the possibility of increased nutrient delivery to lakes.

Putting it All Together

The Wisconsin stormwater regulations provide some basic guidance on managing development to protect lakes—infiltrate and treat the stormwater, and prevent large storms from eroding and carrying sediment to the lake. Of course, rules alone do not ensure that site development will incorporate these principles early enough to take full advantage of opportunities to reduce runoff volume. Incorporating infiltration into development is new to most of us. The planning for stormwater management needs to start early in the development process to identify those areas best suited for infiltration and then protect those areas from compaction during construction. This planning for infiltration, treatment and reduction of peak flows may require coordination of site planning and design activities in ways that development did not have to consider in the past.

The runoff management philosophy in the new Wisconsin stormwater regulations should encourage all lake residents to think about how changes they make to the land can alter runoff generation and movement. How can you change the way stormwater is generated or managed to reduce the impact on the lake? The goals of the Wisconsin runoff regulations—reducing runoff volume, infiltrating runoff and treating water that must leave the site, can be incorporated into individual residential lots through reductions in impervious surfaces, redirecting runoff to areas where the water can infiltrate, and encouraging infiltration by reducing compaction and constructing rain gardens.

By Paul McGinley

UW-Extension Water Quality Specialist UW-Stevens Point Paul.McGinley@uwsp.edu Just meeting the regulations does not eliminate the possibility of increased nutrient delivery to lakes.

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New developments that disturb more than 1 acre need to follow the new stormwater regulations.



Rain Gardens Controlling Runoff Naturally

Photo by Karen Kein



Members of the Birchwood Cove Condo Association on High Lake in Vilas County pitch in by planting a rain garden to help alleviate stormwater runoff problems on their access road.

Rain gardens are used to enhance water quality. an effective way to deal with stormwater issues and to protect lakes from runoff. A rain garden simply collects water from surfaces and allows the accumulated water to slowly filter into the ground rather than running off into stormdrains or lakes. In many areas across Wisconsin, rain gardens are used to enhance water quality, help eliminate erosion problems, provide wildlife habitat, and give an aesthetically pleasing backdrop in both urban and rural areas, along lakes, next to parking lots, and on college campuses.

Rain gardens are soaking up lots of attention as

A typical rain garden is a perennial plant bed sunk 4-8 inches deep with a flat bottom. Most are from 75-300 square feet in size, roughly 1/4 to 1/3 the size of the area collecting water (rooftop, driveways, hillside, backyard, etc.). Crescent, kidney, and teardrop shapes work well for the form of a rain garden.

Planning your rain garden

The cost of installing a rain garden ranges from \$11-\$13 per square foot for all facets of the project, to smaller amounts (\$5-\$6 per square foot) for those willing to do some site preparation and planting themselves.

To calculate the proper size of your rain garden, simply measure the area of the roof, driveway, yard area, or other spot from which you want to collect rainwater. For example, if you had a roof 25 feet wide by 40 feet long, that would give you an area of 1,000 square feet. Most rain gardens are 25-33% the size of the area being collected from, so in this case, make your rain garden 250-330 square feet. Place the rain garden at least ten feet away from the foundations of buildings and not over septic systems or lateral sewer piping. Stay away from big trees (and their roots) and hightraffic areas. Full sun is best for site selection but partial shade spots can work effectively as well. Avoid areas where water already collects; infiltration from these sites is poor. Remember to call Digger's Hotline (1-800-242-8511) before you start.

Native plants are best for rain gardens because they provide assorted benefits to the landscape. Most native plants have roots that grow down twice as deep as the plants are tall, making them efficient at absorbing water. The root penetration by these plants opens up small channels for water to move into, increasing the amount of infiltration. Small insects, butterflies, birds, and other critters use the vegetation as a food source, overwintering area for larvae, cover, nest making material, and additional services.

Choose plants appropriate for the soil conditions and for the given amount of sunlight. Plan for staggered blooming times so you have color in spring, summer and fall. Be sure to include native sedges and grasses. You might add nectar and food sources for butterflies, too. Remember to plant the green side up, and you will help create an effective stormwater control measure and important habitat for local wildlife.

For site selection information, building guidelines, size calculating, and plant selection ideas, visit the UW-Extension website at: <u>http://clean-water.uwex.edu</u> and WDNR website at: <u>http://www.dnr.state.wi.us/org/water/wm/nps/rg.</u>

By Patrick Goggin Vilas County Conservationist



Agents of Change 29th Annual Wisconsin Lakes Convention

Lakes are ever-changing. They reflect the mood of the sky and the strength of the wind. They are changed by rainfall patterns, groundwater movement and the season of the year. They are changed by aquatic invasive species, sediment and nutrient loading, chemical treatments and recreation. Many changes are a reflection of the actions and accomplishments of watershed residents and lake users. Some changes are detrimental; many are positive. Are you an agent of change?

The Wisconsin Lakes Partnership will host the 29th Annual Wisconsin Lakes Convention on April 26-28, 2007 at the KI Convention Center/Regency Suites in Green Bay. GÉNTS The convention theme, "Agents of Change," will focus on ways to be a force for positive change in your lake community. Keynote speakers will address the theme, and you will get hands-on details

on how to be an effective agent of change in your choice of many breakout sessions. Learn how you can work with others to solve issues in your community. Discover ways to effectively reach and influence legislators and other decision-makers. Find out how other individuals and lake organizations have accomplished successful, influential projects, and how you can achieve the same results.

As always, the Wisconsin Lakes Convention will cover a wealth of information on lakes and lake issues such as management and science, lake organization management, wildlife and fisheries, and aquatic invasives. On Thursday of the convention,

workshops and field trips will be offered. Friday and Saturday will feature plenary sessions, breakout sessions, special meetings, and entertainment.

 Watch for more information on the convention agenda

 and how to register in the next issue of *Lake Tides* or online at <u>www.uwsp.edu/cnr/uwexlakes/</u> <u>conventions</u>. Remember, you can be an Agent of Change and make a difference. For your lake's sake, plan on attending the convention! ▲

Lakes Through a Lens

We Make a

Display your skills with a camera while showing your love of Wisconsin's lakes. Enter your favorite lake photo in the 5th annual photo contest at the Wisconsin Lakes Convention this year. Details and entry forms can be found at <u>www.uwsp.edu/cnr/uwexlakes/conventions</u> or by calling 715/346-2116.





Boat Landing Signage: Is it Effective?

Sign, sign, everywhere a sign, Blockin' out the scenery, breakin' my mind Do this, don't do that, Can't you read the sign?

-Five Man Electrical Band - 1972

The lyrics may be somewhat dated, but the message is as clear today as in the Sign, sign Everywhere ₌ a Sign 70s: signage overload! Everywhere you look – highways, parking lots, residential front yards and even waterfront shorelines – signs are littering the scenery. Each sign intends to inform or remind us of some opportunity or activity we might otherwise forget. The best signs function as a prompt, not to change attitudes or increase motivation, but rather to remind us to engage in an action that we are already predisposed to do. What about signs at the boat landing? Are they effective in changing boater behavior?

> Beginning in 2002, WDNR was mandated by Wisconsin Act 109 (which established a statutory framework for the comprehensive state aquatic invasive species program) to post signs at public boat landings, both at launch sites and near the access area exits. There are three signs used by WDNR to inform the public about aquatic invasive species (AIS):

- Yellow "Exotic Species Advisory" sign (16"x 18") if AIS are present in the waterbody;
- Green and white "Help Prevent" sign (12"x 18") if AIS are not known to be present;

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Green and red "Stop" sign



(12"x18") at every landing to remind boaters to clean their boat and equipment when leaving the launch area. The initial signage efforts focused on the access sites with the highest use and proximity to infested waters, as well as non-infested waters. Eventually every public landing will be posted but to date, 85% of all infested waterbodies (totaling 1,902 boat landings) are posted with signs. In total, there are 3,874 signs warning boaters about AIS and reminding them that it is illegal to launch with aquatic plants and zebra mussels attached.

Are boaters reading the signs?

According to 59,000 watercraft inspection surveys from 2002-2006, only 12% of boaters recalled seeing AIS information at the landing, while 44% remembered talking to a watercraft inspector about invasive species. Does this mean signs are too small? Poorly designed? Improperly located at the launch site? The answer could be yes to all, depending on the boat landing you visit. While signs are excellent prompts to target a specific behavior change (especially if they are graphically vivid, explicit in message and positioned in close proximity to the target behavior), many boat landings are too limited in space, narrow in design and already overloaded with informational messages. Still, some communities are focusing their AIS prevention strategies on additional signage, bigger and more graphic than existing designs posted by WDNR. Why are we putting up more signs?

The enormity of the AIS threat has evoked a compelling need to develop a public awareness and education campaign as a front-line component of a defensive strategy. While participation in the *Clean Boats, Clean Waters* volunteer watercraft program is an effective means to educate boaters, some communities opt to use additional signage to either supplement watercraft inspection or replace the inspection process when volunteer interest is waning. Communities are designing a wide variety of boat landing signage, with some signs reaching dimensions of several







This large sign is displayed at a boat landing on Shell Lake in Washburn County.

4' x 8' sheets of plywood. These information centers are cemented into the ground so close to the landing pavement, it is a wonder boaters cannot seem to remember the message.

For example, a boater at Lake Metonga in Forest County could not recall if Metonga contained zebra mussels even though a large sign with vivid graphics and bright lettering was right behind him. Other communities, like the Town of Plum Lake in Vilas County, have integrated their signs and message with a national campaign called, Stop Aquatic Hitchhikers!TM Integrating a national campaign logo with local information provides instant recognition for boaters who often cross state lines.

More signs?

The watercraft inspection surveys have shown after four years of AIS education, 72% of surveyed boaters take prevention steps and clean their equipment when leaving a landing and 70% are aware of the illegality of launching with aquatic plants or zebra mussels attached to the boat. Should your community consider additional signage at the landing to educate boaters?

According to Doug McKenzie-Mohr and William Smith, authors of <u>Fostering</u> <u>Sustainable Behavior: An Introduction to</u> <u>Community-Based Social Marketing</u>, no information strategy will be successful if a behavior change is inconvenient, unpleasant, costly or time-consuming. So before you spend a dime on a new sign, take an inventory of what is currently at the landing, optimize what little space is available and make every effort to make it easy for a boater to check their boat after leaving the landing.

Key points to remember:

- Before you do anything at the landing, make sure you know who owns the landing, and ask for permission before you add or remove anything!
- If the landing is posted with Wisconsin signs, make sure the existing signs are properly placed. The green/white or yellow sign should be close to the launching site and the "Stop" signs should be visible when a boat is exiting the landing. If your landing is not posted, contact a WDNR service center for free signs.
- Remove any old, outdated or broken signs. If several signs contain the same message, consolidate into one sign. Keep the message short and use graphics; the less text, the better. For sign examples, visit the *Clean Boats, Clean Waters* website (see below for web address).
- If you have a kiosk, order and stock current AIS pamphlets. See the *Clean Boats, Clean Waters* website for publication choices.
- Provide a staging area for boaters and watercraft inspectors to check/ clean boats away from the launching area and shoreline. If electricity and water are available at the landing site, provide a portable sprayer to rinse boats.
- Designate a "weed disposal" area, away from the water's edge.

Most importantly, participate in the *Clean Boats, Clean Waters* volunteer watercraft inspection program. While signs can give information, personal contacts provide major influence on boater behavior and attitudes.

By Laura Felda-Marquardt Clean Boats, Clean Waters Coordinator UW-Extension Lakes Program

Web resources:

Clean Boats, Clean Waters volunteer watercraft inspection program www.uwsp.edu/cnr/uwexlakes/CBCW

Stop Aquatic Hitchhikers!TM - www.protectyourwaters.net

Mapping the Spread of Eurasian Watermilfoil

For over 40 years, Eurasian watermilfoil (EWM) has caused mischief in Wisconsin's lakes. Although some anecdotal reports suggest this non-native submersed aquatic plant species was here in the 1930s, it is possible that native milfoil species may have been mistaken for EWM.

The first documented, positively identified infestation of EWM was in Avoca Lake near the Wisconsin River in Iowa County in 1965. Other early infestations included Pewaukee Lake (1966); Lake Mendota and Fish Lake near Madison (1967); Lake Butte Des Morts near Oshkosh, Lake Wingra, Green Lake, Lake Five near Merton, and some of the open water areas of Horicon Marsh (1969).



Since then, EWM has continued to spread across the state. Southeast Wisconsin, with many lakes that are heavily used by recreational boaters, was the first geographic region to see multiple EWM infestations from the late 1970s into the early 1990s. While the spread of EWM across the rest of the state has been more gradual, since 2000 a greater number of new EWM infestations have been found in the northern half of the state than in the south

EWM is now a greater threat in northern

Wisconsin where the majority of lakes are located but where the fewest EWM infestations have been found. The map shows the geographic spread of EWM into new areas of the state. Currently, 466 EWM infestations have been verified, including 420 inland lakes, 15 inland river segments, 20 Great Lakes bays and harbors, and 11 interstate river segments (consisting of the Mississippi and Menominee Rivers).

Each new location of EWM can become a local source lake from where EWM may radiate to nearby lakes. For example, EWM was first found in Beaver Dam Lake in Barron County in 1991. The plant is now found in nearby Duck, Echo, Kidney, Sand, and Shallow Lakes. Because EWM travels with boaters and anglers, it is very important that all plant fragments are removed from motors, trailers and gear such as anchors.

Lake organizations are strongly encouraged to have volunteers trained in the *Clean Boats Clean Waters* program and start inspection programs at their boat landings. Prevention remains the most effective and cost efficient way to control EWM. Once the plant is established in a lake, management options are limited, and EWM has never been successfully eradicated from a lake. If EWM arrives, a lake organization should immediately begin thinking about long-term management and develop an Aquatic Plant Management Plan.

By Frank Koshere and Matt Rehwald Wisconsin Department of Natural Resources

Web resources:

Stop Aquatic HitchhikersTM www.protectyourwaters.net

Clean Boats Clean Waters volunteer watercraft inspection program www.uwsp.edu/cnr/uwexlakes/cbcw

Draft Aquatic Plant Management plan www.uwsp.edu/cnr/uwexlakes/ecology/ APMguide.asp



Citizen Lake Monitoring

Network 20 Years of Giving a Little Back

An amazing number of volunteers have taken part in the Citizen Lake Monitoring Network (CLMN), formerly known as Self-Help, since its beginnings in 1986. Of the over 2400 volunteers in the first 20 years, fourteen individuals have been with the program since its beginning.

Each of these individuals is a historian and limnologist on his or her lake. In a recent survey of these long-time volunteers, they all expressed love and respect for that body of water that they have spent so much time studying and enjoying. Those feelings motivated them to begin water quality sampling twenty years ago and keeps them going today.

The lakes these volunteers work on range in size from 39 acres to 7,346 acres. Some volunteers have seen an improvement in water quality and water clarity, others have seen a bit of a decline. Most say that water quality has remained consistent for the last twenty years. The most striking improvement is Delavan Lake, where a lake restoration project helped to improve water clarity from a low of three inches to a current average of 8 to10 feet.

There are differences in the watersheds surrounding these volunteers' lakes. Much of the land around 892-acre Franklin Lake is owned by U.S. Forest Service, therefore development has not changed the landscape very much. On the other end of the development spectrum, three thousand customers are served by the sewer system that services the property owners on Delavan Lake.

Despite the differences in their lakes, these volunteers have much in common. They share concern about aquatic invasive species and the pressures of development and recreation. Over the years, they've seen changes in the values and attitudes of folks living on and using the lake. Mr. Whyte recalls when recreation on Webb Lake consisted of fishing and catching frogs. Now big boats with big engines are commonplace. Things aren't quite the same as they were twenty years ago.

In addition to gathering valuable water clarity data that will be used for decades to come, these twenty-year veterans collect water chemistry data and monitor aquatic invasive species, water levels and aquatic plants. They participate in habitat and shoreland restoration and fish surveys. All of the volunteers share the belief that what they are doing today will benefit future generations. In the words of Mr. August: "While there may not be a lot of glory in being a CLMN volunteer, what we are doing will assist scientists in evaluating our lake. People should be responsible to the resource. We heap a lot of abuse on our natural resources -- being a CLMN volunteer is one way to give a little back."

A summary of each volunteer and their lake can be found on the CLMN web site at: <u>http://</u><u>dnr.wi.gov/org/water/fhp/lakes/selfhelp</u>

By Sandy Wickman Wisconsin Department of Natural Resources

20 Year Volunteers!

Robert August – Lake Chetek, Barron County Mary Jane Bumby - Green Lake, Green Lake County William Flader - Witters Lake, Waushara County Steven Frey - Cedar Lake, St. Croix County Dale Jalinski - Bear Lake, Oneida County Howard Lang - Green Lake, Washington County Kevin MacKinnon - Delavan Lake, Walworth County Gerald Ptaschinski - Porters Lake, Waushara County Tom Rulseh - McDonald Lake, Vilas County Kay Scharpf - Franklin Lake, Forest County Elaine Spees - Huron Lake, Waushara County Loren Swanson - Big Hills Lake, Waushara County William Whyte - Webb Lake, Burnett County Stanley Young - White Lake, Marquette County



Predicting Boater Behavior Survey Says!...

For the past four years, WDNR staff, volunteers and student interns, donned in blue and white *Clean Boats, Clean Waters* t-shirts have surveyed boaters at landings across the state. By inspecting 59,000 boats and talking to 120,000 boaters, surveyors learned how frequently boaters move to different lakes, whether they clean their boat and equipment when leaving the landing, and whether they are aware that it is illegal to launch a boat or equipment with aquatic plants or zebra mussels attached (Section 30.715, Stat. 2001 WI Act 16). The resulting data will help shape and drive future aquatic invasive species education efforts. Here is what the survey says:

86% of surveyed boaters were from Wisconsin
68% of surveyed boaters were fishing
63% of boats inspected had motors above 50 horsepower
5% of boats entered the landing with aquatic plants attached
17% of boats attempted to leave the landing with aquatic plants attached
37% of boats arrived from a waterbody infested with aquatic invasive species
43% of boats moved from another lake within five days (lake jumping)
72% of boaters are taking prevention steps (cleaning boats and equipment)
70% of boaters are aware of the "illegal to launch" law

If you would like more information on the *Clean Boats, Clean Waters* watercraft inspection program, visit <u>www.uwsp.edu/cnr/uwexlakes/cbcw</u>.



We often get phone calls and emails from Lake Tides readers with a variety of questions about lake districts. Do you have a question about lake districts that you would like to see answered in Lake Tides? Send it to uwexlakes@uwsp.edu so we can include it in a future issue.

A lake district may apply for a CES number using Form S-103 – Application for Wisconsin Sales and Use Tax Certificate of Exempt Status. For more information and a copy of the form, contact the Wisconsin Department of Revenue or see <u>www.dor.</u> <u>state.wi.us</u>.

Lake associations and other voluntary organizations that are recognized as federally tax-exempt under Section 501c3 of the Internal Revenue Code are also eligible to apply for state sales tax-exempt status. They can apply using the same form from the Department of Revenue, but will need to demonstrate their qualifications as a nonprofit organization.



Fishing Clean boat

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What's in a Name?

New parents spend nine months or so pondering a name for their child, often considering the names of special people or traditional family names. In turn, children often wonder why parents chose the name they did, especially if it happens to rhyme nicely with a childhood chant!

Our lakes in Wisconsin receive an equal amount of thought and time when being named or, as happens occasionally, undergoing a name change. The Wisconsin Geographic Names Council is charged with properly determining the correct or most appropriate name for lakes, streams, places and other geographic features in the state. The Council makes decisions on about a dozen name requests each year.

Unlike naming a child, there are policies and guidelines the Council uses when naming a lake. For example, only lakes ten acres or more in size are considered for naming unless there are special circumstances, such as significant public use. Not allowed are names indicating possession, derivations of scientific names, or those honoring any living person. The Council encourages names that are historical in nature, along with those with French or Indian origin. Our state's name has such origins. It's rather difficult to follow, so read carefully..."Wisconsin" is the English spelling of a French version of an Indian name for the river that runs through the center of our state. It means "river of red stone" or "river of the great rock." (That's only one theory. Other sources claim it means "Gathering of the Waters.")

Like Baby Jacob or Baby

Emily (who were given the most popular names in 2005), some lakes share their names with many others. Do you live on one of the 116 Mud Lakes in Wisconsin? Or maybe you are near Bass Lake (82 of those), Long Lake (59), Spring Lake (45) or Lost Lake (42). Whatever the name of your favorite lake, it is one of Wisconsin's over 15,000 gems. That's a lot of names.

For more information on the Geographic Names Council see <u>www.dnr.state.wi.us/org/</u> water/fhp/lakes/gnc.htm. •

By Kim Becken UW-Extension Lakes Program



Pardee in Burnett County

A heartfelt goodbye and good luck to Mary Pardee, Lakes Education Specialist and *Lake Tides* editor. Mary is now the UW-Extension 4-H Youth Development Educator in Burnett County. We wish her well and appreciate the years of service she has given the Wisconsin Lakes Partnership. Mary has been a positive force for lakes, her passion for youth and her understanding of the importance of blending the arts with science will be greatly missed. Not to mention her great smile and fun-loving attitude. We'll miss you Mary!

"Don't be dismayed at good-byes. A farewell is necessary before you can meet again. And meeting again, after moments or lifetimes, is certain for those who are friends."



- Richard Bach

Assistance for Your Lake Planning Grant Project

The type of assistance you need for your lake planning project depends upon where you are in the planning process and what type of plan you are developing. Assistance can_come from a variety of sources including government agencies, professional consultants, publications and volunteers right in your back yard. It is important to realize that there is variety in the expertise and qualifications among these sources in their



One of the first places to go for assistance is your regional WDNR lake specialist.



As discussed in the Summer 2006 issue of *Lake Tides*, the first step in successful planning is scoping – organizing thoughts, issues and people, and developing the blue print for your planning project. In this preliminary but very important step, it is useful to have assistance from someone with organizational planning and facilitation experience as opposed to technical or engineering qualifications. Experts generally agree that a neutral third party without a stake or interest in the final plan or its outcomes is one key to getting started on the right path. This is a short duration task, usually completed in a few months, and hiring a private consultant may not be practical or necessary. Fortunately, help with project scoping and planning is available through government agencies, universities or right around your lake. Often there are people who have acquired organizational and project management skills in their careers that can help with the process.

The University of Wisconsin-Extension Community, Natural Resource, and Economic Development agents and Basin Educators are often trained facilitators who can assist local community groups. Other sources may include regional planning commissions, community foundations, and local universities and colleges.

One of the first places to go for assistance is your regional WDNR lake specialist. Schedule a meeting to present your ideas and interests, get direction, find out what background information (data, maps, reports, existing studies) is available to help you in the planning process BEFORE YOU START! Bring your planning committee and your consultant if you are using one. A similar meeting with the local county land and water conservation department may be helpful to save time and avoid unnecessary duplication. Many groups begin planning unaware of the free help available or that someone is already studying their lake.

A good scoping effort will help you identify future tasks and the types of assistance and expertise that will be needed to complete the tasks. In other words, after scoping you will have a better idea of what qualifications you need in a consultant. You will know what types of data need to be collected, what studies need to be completed and correspondingly, what expertise you will need (aquatic plant specialist, land use planner, water quality modeling, etc.) to complete the plan.

At this point an organization will usually hire one or more contractors to collect the data,



conduct the studies and develop the plan. While often this means hiring a private consulting firm, county land and water conservation departments, regional planning commissions, the U.S. Geological Survey and local universities and colleges can also provide these services. And don't forget those volunteers!

There are many things to consider when selecting the right contractor for your lake planning project; too many to mention here. Regardless of whether it's a private or public consultant you'll need a clearly defined scope of work. You will also need to follow legal requirements (including your own organization's bylaws!) for purchasing services, check qualifications and references among other details.

A new, short publication called "Selecting a Contractor for Lake Planning Grant Projects" details the steps in selecting a consultant including example interview questions and other tips. It is available at: www.wisconsinlakes.org/LakeGroups/PDFs/ ChooseContractorGuide.pdf.

More in-depth information is available in "How to Hire a Planning Consultant." This is available from UW-Extension at <u>www.uwsp.</u> <u>edu/cnr/landcenter/Publications/rfp-guide.pdf</u>.

To help you find potential contractors, the Wisconsin Lakes Partnership maintains a directory of companies that provide lake management services. This is simply a listing of firms that do business in Wisconsin without any endorsement of qualification from the Partnership. It is available at: <u>www.uwsp.</u> <u>edu/cnr/uwexlakes/lakelist</u>. It's important to remember that the only certification program for lake managers and professionals is through the North American Lake Management Society (NALMS). A handful of consultants in Wisconsin are certified and can be found at: <u>http://nalms.org/clms/clms.htm#WI</u>.

UW-Extension CNRED agents and Basin Educators can be found at: <u>www.uwex.edu/ces/cnred/index.cfm</u>. Or, simply visit your local county extension office. The best description of regional planning commissions, the services they provide and how to contact them is at <u>www.dot.wisconsin.</u> <u>gov/projects/planorg/rpc.htm</u>.

A directory of county land and water conservation departments can be found at <u>www.</u> <u>datcp.state.wi.us/arm/agriculture/land-water/</u> <u>conservation/lcdir.jsp</u>.

Finally, some key written references that will help you and your planning committee understand lake management planning are:

"A Model Lake Plan for a Local Community" at <u>http://s142412519.onlinehome.us/uw/pdfs/</u> <u>G3606.PDF</u>.

THE WATER?

"How's the Water: Planning for Recreational Use on Wisconsin Lakes and Rivers" a Lakes Partnership publication available for order at <u>www.uwsp.edu/cnr/uwexlakes/publications</u>.

"Managing Lakes and Reservoirs" a USEPA publication as well as the periodicals *LakeLine* and *Lake and Reservoir Management* are both available for order through the North American Lake Management Society at <u>http://</u> nalms.org/.

Successful planning will tap into as many sources of assistance as possible. If you receive a state lake management planning grant, you and your lake organization have agreed to take on much of the responsibility, and therefore control, of the process. Do not expect the WDNR or your consultant or contractor to assure that everything will work out fine. After all, it is your plan! Be a smart consumer

Lake Associations

research, shop around, and use all your resources.

By Carroll Schaal Wisconsin Department of Natural Resources

Grants In Your Pants Two Cost-Sharing Programs Available



The Wisconsin Department of Natural Resources (WDNR) announces the availability of applications for two cost-sharing programs: *Targeted Runoff Management* (TRM) and *Urban Nonpoint Source and Storm Water Management* (UNPS) grants.

Applications will be available beginning January 12, 2007. In order to be considered for calendar year 2008 funding, applications must be postmarked no later than **Monday**, **April 16, 2007**.

Since these programs began in 1999, WDNR has awarded a total of 511 grants to 195 different governmental units, \$17.93 million in TRM and \$32.19 million in UNPS grants.

What are these grants used for?

Targeted Runoff Management (TRM)

TRM grants are competitive cost-share awards to support small-scale, two-year projects sponsored by local governmental units. Projects may be either urban or rural in nature. The maximum award is \$150,000. Project selection is based on geographical water quality priorities, local support for the project, ability of the project to control nonpoint pollution, and other factors. Municipalities required to obtain a stormwater permit under ch. NR 216 are not eligible for TRM grants.

Urban Nonpoint Source and Storm Water Management (UNPS)

UNPS grants are competitive cost-share awards to support small-scale, two-year projects sponsored by local governmental units in urban areas. Municipalities needing stormwater permits under ch. NR 216 are eligible to apply under this program. UNPS grants are available in the two categories of construction and planning.

Eligible UNPS construction projects are site-specific, serve areas generally smaller in size than a subwatershed, and are targeted to address high-priority nonpoint source pollution problems. The maximum award is \$150,000.

Eligible UNPS planning projects can include municipal storm water planning, storm water and construction site erosion control ordinance development, development of local storm water management financing options (such as stormwater utilities) and information and education efforts. Planning projects must be conducted in an existing urban area or an area expected to become urban within 20 years. The maximum cost-share grant award is \$85,000.

Both programs operate on a reimbursement basis. This means grantees must pay all project costs first, then request reimbursement from WDNR. Supporting financial documentation must be submitted with reimbursement requests. Reimbursement rates vary depending upon the project type and special conditions.

For grant applications and additional details see <u>www.dnr.state.wi.us/org/water/wm/nps/</u><u>financial.htm</u>.

By Kathleen Thompson Grants Coordinator Wisconsin Department of Natural Resources 608/267-7568



Congratulations Graduates!

Every two years, the Wisconsin Lakes Partnership graduates a group of special lake stewards from the Lake Leaders Institute. The individuals in Crew VI have participated in three trainings over the course of a year which focused on technical and people skills. With new tools and knowledge in hand, Crew VI members will be able to enrich their communities and the waters within them.

At an October 20 ceremony at Aldo Leopold's shack near Baraboo, the following Wisconsin lake residents graduated from the Lake Leaders Institute:

Rollie Alger – Vilas County John Annin – Vilas County Chuck Block – Sawyer County Jon Blume – Marathon County Dean Boehne – Eau Claire County Kent Brown – Jefferson County Kristin Charleton – Eau Claire County Paul Dearlove – Jefferson County Sue Drum – Vilas County Sue Drum – Vilas County Karen Engelbretson – Polk County Brian Ewart – Oconto County Mary Jo Fleming – Chippewa County Mary Jo Gingras – Iron County Charles Handel – Walworth County Jane Jacobson-Brown – Jefferson County Roger Kees – Chippewa County Carol LeBreck – Bayfield County Dennis McCarthy – Jefferson County Pamela Meyer – Waukesha County Dan Pagel – Oneida County Nate Rice – Waukesha County Nate Rice – Waukesha County Sara Schmidt – Eau Claire County Paul Schumacher – Door County Jenny Shillcox – St. Croix County Mike Strebe – Manitowoc County Bob Tomashek – Shawano County Pamela Toshner – Washburn County Fran West-Tomashek – Shawano County Lorna Wilson – Douglas County Roger Wilson – Douglas County

For more information on the Lake Leaders Institute and how you could be a member of Crew VII, see <u>www.uwsp.edu/cnr/</u> <u>uwexlakes/lakeleaders</u> or call 715/346-2116.

CALENDAR

February 1, 2007 – Application deadline for Lake Planning and Aquatic Invasive Species Control Grants. Contact your DNR Lake Coordinator for more information.

February 1-2, 2007 – 12th Annual Wetland Science Forum, La Crosse. For more information: <u>www.wiscwetlands.org</u>

March 3-5, 2007 – 27th Annual MAPMS (Midwest Aquatic Plant Management Society) Conference, Milwaukee. For more information: www.mapms.org

March 16, 2007 – Lake Stewardship Award Nomination Deadline. Nominate an individual or group who dedicates time and talent to Wisconsin's waters for this prestigious award. For more information: www.uwsp.edu/cnr/uwexlakes/conventions

April 26-28, 2007 – 29th Annual Wisconsin Lakes Convention, KI Convention Center, Green Bay. For more information: <u>www.uwsp.edu/cnr/uwexlakes</u>



Lake Tides -- 905032

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Wisconsin Lakes Partnership



Published Quarterly

Internet: <u>www.uwsp.edu/cnr/uwexlakes</u> E-mail: uwexlakes@uwsp.edu Phone: 715/346-2116 Editor: Mary Pardee Design Editor: Amy Kowalski Contributing Editors: Robert Korth & Tiffany Lyden, UWEX, Carroll Schaal, WDNR Photos by: Robert Korth (unless otherwise noted) Illustrations by: Carol Watkins, Chris Whalen

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Printed on recycled paper with vegetable-based ink.

Reflections

A utumn is a second spring when every leaf is a flower.

~Albert Camus