

### Shallow Lakes Forum

Please attend the Sixth Shallow Lakes Forum – “Development and Implementation of Shallow Lake Management Plans on March 30, 2009 at the Oak Ridge Conference and Hotel Center, Chaska.

Shallow Lakes Forum VI is designed to provide participants an opportunity to visit with professional planners, learn about planning processes that impact shallow lake systems (including the technical, socioeconomic, and regulatory criteria critical to success), and participate in presentations and panel discussions that highlight shallow lakes management in action. We anticipate the 2009 forum to be most useful to local government unit, lake association, conservation organization, planning and zoning, and agency staff responsible for developing and implementing management plans for shallow systems. Interested individuals will find this forum informative and insightful – particularly those developing plans, struggling to implement plans already underway, and making policy decisions.

- \$50.00 for pre-registration by March 18<sup>th</sup> and \$75.00 for registration after March 18
- Registration waivers available for Minnesota River Board members

Your forum registration fee includes:

- Access to all speakers/activities at the forum
- Shallow lakes educational and information materials
- Refreshments and a terrific lunch buffet
- Panel information about future funding opportunities
- Updated Shallow Lakes Brochures
- Updated Shallow Lakes Mgmt Planning Workbook
- Summaries of speaker topics and programs

For more information, <http://mavdisk.mnsu.edu/kudels/slfagenda.pdf>

### Parks and Trails Legacy Meeting

The Parks and Trails Legacy subcommittee will be holding its first hearing on Friday, February 27th from 8:30 AM - 11:30 AM at the Como Lake Pavilion located in Como Park (1360 Lexington Pkwy N., St. Paul). Chairwoman Torres Ray will be convening the three hour long meeting in order to hear presentations from selected organizations responsible for parks and trails and facilitate a conversation to define priorities in regards to legacy funding. If you would like to attend please do so. Thank you, Shannon N. Anderson; Legislative Assistant; Senator Patricia Torres Ray; Minnesota District 62; (651) 296-4274; 75 Rev. Dr. Martin Luther King Jr. Blvd. St. Paul, MN 55155-1606; 124 B State Capitol; [sen.patricia.torres.ray@senate.mn](mailto:sen.patricia.torres.ray@senate.mn)

### Chippewa River Watershed Project Annual Meeting

The Chippewa River Watershed Project is hosting its Annual Meeting on Thursday, March 19 at the Starbuck Community Center. The evening begins with registration and social gathering at 5pm, meal at 6 pm, and program at 7 pm. Meals are free with registration. Presentations will be given on the latest monitoring results and the upcoming Turbidity TMDL. See the attached flyer for additional information. Please RSVP to Jennifer by Monday, March 16 at 320-269-2139 ext 120 or [jennifer.hoffman@rednet.net](mailto:jennifer.hoffman@rednet.net).

*This event is free and open to all. Bring your spouse, bring your family members, bring your neighbors! Spread the word and help make this the biggest Annual Meeting yet. Hope to see you there!*

### **Maple Syrup Clinic in Mankato:**

Learn how to tap a few maple trees in your yard or woodland and make high quality maple syrup products. This program will have something for the beginner and the experienced producer. Learn about history & tradition, maple resources in Minnesota, identifying maple trees, production basics, taps/tubing/equipment, processing the sap to syrup, determining accurate density measurements and products that can be made from the sap of maple trees. Web resources will be discussed and handout material will be at the session. Carl Vogt, UM Extension Forester will be the featured speaker. This educational clinic on "Maple Syrup" will be held Tuesday, March 3, from 6:30 p.m. to 8:30 p.m in Mankato. Registration is \$20. Pre-registration is requested. This clinic is sponsored by the University of Minnesota Extension.

The public is invited to attend. Woodland Advisor and Master Gardener credits are available upon request. To register for this Maple Syrup Clinic, visit: <http://cfc.cfans.umn.edu/wa/> or contact Kathy Eckwright, 507-389-6972 or 888-241-3214, [eckwr001@umn.edu](mailto:eckwr001@umn.edu).

### **The dirt on river sediment**

*By Tom Cherveney - 02/14/2009*

MONTEVIDEO — The Minnesota River continues to carry more and more sediment to Lake Pepin, but it's not because we're losing the battle to reduce erosion in farm fields. Increasingly, the evidence is indicating that the proliferation of artificial drainage has greatly accelerated the rate of erosion from the banks of ravines, streams and the river itself. "The rate of non-field erosion is increasing, and it's not natural," said Dr. Shawn Schottler, an environmental engineer and senior scientist with the Science Museum of Minnesota. Schottler and Dr. Carrie Jennings, a geologist with the University of Minnesota, outlined what is being discovered during a multi-year study focused on the sediment load building in Lake Pepin. They spoke during the annual meeting of Clean Up the River Environment on Saturday in Montevideo.

"The story of Lake Pepin is the story of the Minnesota River," said Schottler. The Minnesota River contributes 38 percent of the water to Lake Pepin, but it provides 85-90 percent of the sediment, the study has shown. The Mississippi and St. Croix Rivers are the other major sources of water to the lake. The Minnesota River's glacial legacy makes it naturally prone to erosion, but we've speeded up that process dramatically. Prior to European settlement, sediment in the Minnesota, St. Croix and Mississippi Rivers was coming to Lake Pepin at a rate that would take 3,600 years to fill the lake. Now, the sediment will fill the lake in only 300 years, said the two. Schottler has been "finger printing" the sediment in Lake Pepin to determine its source.

He is able to differentiate between soils that originate in farm fields and those from river, stream and ravine banks. From the start of farming to 1950, field soils accounted for the increasing volume of sediment reaching Lake Pepin. Sediment cores show that during this period the amount of sediment coming from farm fields continued to grow each year.

Scientists expected the sediment load to hold steady or begin decreasing after the 1950s.

By then, 95 percent of the perennial prairie cover had been converted to farming and no new field sources of sediment were being created. Also, conservation practices and new technology were helping reduce field erosion. And in fact, Schottler said the total mass of sediment coming from farm fields each year has not grown greatly from 1950 to today. It may be slightly declining.

But the overall load of sediment being carried by the river has continued to grow each year since 1950, with the exception of drought years. Analyses taken of sediment cores in Lake Pepin and other water bodies in the basin show why: The amount of sediment coming from the banks of the river, and tributary streams and ravines is growing. These non-field sources of sediment now accounts for 67-70 percent of the sediment load reaching Lake Pepin, the reverse of what was the case in 1950, when farm fields were the major source. "I think we've made our rivers more erosive over time, but I said I think," said Schottler. While we know where the added sediment is coming from, more research is needed to show why.

Both researchers said they suspect that artificial drainage is playing the major role. "We've changed the terms of it," said Jennings of the natural erosion in the glacier-carved landscape. "We've given it a lot more water to do its work." The great expansion of artificial drainage, along with a trend towards a wetter climate, means the natural process of erosion is happening much, much faster, they believe.

The Lake Pepin study could help guide future environmental policy in the region, the speakers noted. Funds aimed at reducing farm-field erosion might be more effectively spent to mitigate the erosion caused by drainage practices, noted the two. They also noted that research is needed to look at how we can reduce erosion from drainage. It might be better to outlet tile lines directly into the river, instead of in ravine banks, for example. Schottler also pointed out that the sediment coming from non-field sources does not carry the high amounts of phosphorus and nitrogen as sediment from fields. Its environmental impact is not the same. (West Central Tribune)

### **Making Deposits in a Different Kind of Bank**

BUTTERFIELD, MINN. — David Raney realized that some of his land near Darfur, Minnesota was in odd shaped parcels. So what did he do? He went into banking, Wetland banking.

Raney, who lives north of Butterfield, Minnesota, has sold credits to about 30 acres of difficult-to-rent land to groups needing wetland credits to compensate for destruction of wetlands. By doing so, he has profited the environment as well as himself.

Raney makes the land available to businesses, developers, and the like, to make up for wetlands destroyed in development. State regulations call for wetlands to be replaced at two acres for each one acre lost.

What he sells is "credits" for wetlands restored, Raney explains, and the paperwork is all filed at the county courthouse. Engineers evaluate the property and if it passes snuff, it becomes part of the state wetland bank where it can be used as a credit toward another project's impact. "You still own the land and the water," he said. "Your responsibility is to keep it as a

wetland forever. Destroyed wetlands are something Mother Nature cannot replace by herself.”

Most of the credits Raney sold went to railroads, while some went to Wal-Mart for the New Ulm store. The banked land had been tilled since the late 1800s, but not deeply. It was even used as sheep pasture for awhile. He said a small triangle-shaped patch of land isn't profitable for farming, but it can be profitable as wetlands. Most of his banked land is low meadow or wetland, but he also has about seven acres of upland he said is equally important. “Uplands are important for nesting birds, deer habitat, and as a filter strip for rain,” he noted. As a self-proclaimed “wildlife nut,” Raney has taken measures to preserve the environment and wildlife habitat for years so the idea of wetland banking made complete sense to him.

Wetland banking is sustainable since it can more than pay for itself. The best quality wetlands can go for tens-of-thousands of dollars per acre. He has heard of some wetland replacement credits near Madison, Wisconsin, going for about \$1.10 a square foot — nearly \$50,000 an acre.

The spot where Raney has his banked land is near a road, so he is trying to use the site as a showcase for what is possible in setting aside wetlands. “Since it's by the road, I'm trying to use stuff people haven't seen,” he said, “(plants like) cinnamon willow, sneeze weed – which the pioneers used as snuff, Joe Pye weed that has purple flowers in August, and purple meadow rue.”

He picks a lot of his own seed, grinds it up, and spreads it by hand. It is an impressive feat considering there are about three million seeds to the ounce. Some seeds he grows and then cuts like patches of sod. He stratifies others which requires keeping seeds cold as they germinate.

Advocating wetland banking is nothing new to Raney, but something he has promoted for years. “When I was with the SWCD (Soil and Water Conservation District), I used to talk to farmers and try to get them to put land into native grasses or CREP...those small pieces are hard to farm,” he said. People interested in restoring a wetland to place in a wetland bank should contact their local SWCD office. Raney has discovered how to protect the environment, provide important wildlife habitat, beautify the landscape, and earn money while he does it.

Rural Advantage is a nonprofit corporation based in Fairmont, Minnesota. Their mission is to promote the connections between agriculture, the environment and rural communities in order to improve ecological health, economic viability and rural vitality. Their work centers around efforts to reduce agricultural nonpoint source pollution with major programming focused on the 3<sup>rd</sup> Crop Initiative, ECoPayPack development and building the Madelia Model concept. Contact them at 507-238-5449 or visit their website at [www.ruraladvantage.org](http://www.ruraladvantage.org) for more information.

### **Minnesota Environmental Partnership (MEP) Legislative Days**

Join citizens from across the state in St. Paul to meet with your legislators and urge them to Protect Minnesota's Future! Minnesota is a special place. Our lakes, rivers and streams, and great outdoors are a part of our way of life and who we are. We have a duty to be good stewards of our state - to protect it and restore it so we can pass it on to our children and grandchildren. We need your voice to make sure Minnesotans are

heard and Minnesota's lakes, streams and Great Outdoors are protected for all to enjoy. To protect Minnesota's future, the Minnesota Environmental Partnership has selected four priority issues for the 2009 legislative session:

- Safe Mines to Protect Our Water
- Driving Innovation: Clean Cars for Minnesota
- Building Sensible Communities
- Safeguarding Investments for Minnesota's Future

We need you to attend and tell your elected officials to Protect Minnesota's Future. To register: Visit [www.ProtectMNFuture.org](http://www.ProtectMNFuture.org) or call 651-290-0154

- Thursday, March 5th Metro Area Day at the Capitol
- Thursday, March 12th South Central Minnesota Day at the Capitol (Mankato)
- Thursday, March 26th Western Minnesota Day at the Capitol (Morris)

### Green Lecture Series Speaker

The public is invited to hear the next speaker in Centenary's Environmental Lecture Series. Paul Vogel, the Director of Community Development for the City of Mankato will speak at 7:30 p.m. Monday, March 9, at Centenary United Methodist Church, 501 South Second Street. The title of his talk is "An Overview of Mankato's Sustainability Plan." He will discuss progress that has been made in implementing the plan since its adoption by the Mankato City Council on May 12, 2008. The text of the plan can be found by going to [www.ci.mankato.mn.us](http://www.ci.mankato.mn.us), then clicking on Mankato Area Environmentalists under community links.

Mr. Vogel has worked for the City of Mankato and its residents since 1994. As Director of Community Development, he works with his staff and other city team members to plan for Mankato's community and economic development needs. He served as the City's Zoning Administrator, Associate Planner, and Planning Administrator before being appointed to his current position. Prior to joining the City of Mankato, he worked with the Water Resources Center at Minnesota State University, Mankato. He earned his master's degree in geography, with an emphasis in urban geography, and his bachelor's degree in geography, earth science and geology from Minnesota State University, Mankato. Mr. Vogel is a member of the Minnesota Chapter of the American Planning Association.

This series is free and open to the public.

### Events:

March 18<sup>th</sup> (Wednesday) is a **Conservation Drainage Session** starting at 6:00 p.m. with free snacks and refreshments at the Joseph Brown Center in Henderson. This informational session is designed to help the public learn more about this exciting way of water management. Experts who have been working on the development of this concept along with those who have been involved with it for several years will be on hand to provide an overview and answer questions from the public. For more information, <http://mavdisk.mnsu.edu/kudels/conservationdrainageflyer.pdf>

March 19<sup>th</sup> (Thursday) is the second of three **Conservation Drainage Sessions** starting at 6:00 p.m. at the Kilowatt Community Center in Granite Falls. For more information, <http://mavdisk.mnsu.edu/kudels/conservationdrainageflyer.pdf>

March 24<sup>th</sup> (Tuesday) is a presentation on **Energy Savings Landscapes** from 6:00 to 8:00 p.m. in Montevideo. Learn how trees and shrubs can be used to help you save energy year round. Strategically placed trees and shrubs in shelterbelts, windbreaks and in the home lawn, can enhance property value, aesthetics, wildlife habitat and can reduce energy costs by 25 to 30%. Registration for each workshop is \$ 20. Pre-registration is requested. The public is invited to attend. To register for any of these workshops visit: <http://cfc.cfans.umn.edu/wa/> or contact Kathy Eckwright, 507-389-6972 or 888-241-3214, [eckwr001@umn.edu](mailto:eckwr001@umn.edu).

April 7<sup>th</sup> (Tuesday) is the last of three Conservation Drainage Sessions starting at 6:00 p.m. at the Best Western Hotel in Mankato. For more information, <http://mavdisk.mnsu.edu/kudels/conservationdrainageflyer.pdf>

**Check out additional upcoming events and workshops on the Minnesota River Calendar at:** <http://mrbdc.mnsu.edu/calendar/index.html>

### Water Quality Articles

Pawlenty's meeting with producers dominated by budget talk (Agri News). The state budget dominated Gov. Tim Pawlenty's meeting with Minnesota's milk producers Feb. 10.

Energy-panel leaders surprised by changes in state stance on greenhouse-gas action (MinnPost). Legislators involved in energy policy are increasingly doubtful that Gov. Tim Pawlenty will push, or even support, the kind of "bold" energy initiatives that he urged of his fellow governors in national speeches just two years ago.

Stimulus To Give Mpls. Coffee Shop Shot Of Energy (WCCO TV). Pumping out all those lattes and cappuccinos takes a lot of energy -- not just to warm the drinks but the customers in the building too.

Mercury in walleye, northern pike keeps rising, MPCA finds (Minneapolis Star Tribune). The concentration of mercury in walleye and northern pike has shown an unexpected long-term rise in lakes throughout Minnesota, and scientists believe the problem has global causes and consequences.

Is Minnesota becoming cougar country? (Minneapolis Star Tribune). There are definitely a few cougars wandering their way into Minnesota, but most sightings turn out to be false.

Best Buy expands e-recycling program nationwide (MinnPost). **Best Buy** has expanded its electronics recycling program to all U.S. stores.

Bureau: Farmers earn 19 cents on each dollar (Fairmont Sentinel). This week, the average American has earned enough disposable income to pay for an entire year of groceries for a family of four, says Les Anderson, Martin County Farm Bureau president.

Environment could get help from stimulus plan (Outdoor News). While the federal government is providing about \$787 billion in "stimulus" funding to ease the nation's economic woes, it's likely at least some of that would trickle toward the environment. Some conservation groups say that has, in fact, occurred.



[Sodsaver deadline for govts comes and goes](#) (Outdoor News). An informal deadline for a federal Farm Bill provision known as "Sodsaver" came and went this weekend, with governors from none of the eligible Midwestern states signing on.

[Recycling hurting, but could be worse](#) (Mankato Free Press). With all the talk about the mortgage crisis and bailouts for auto makers, another cause for concern slid slightly under the radar: recycling.

[Manure: Once a nuisance, now a value](#) (Fairmont Sentinel). Not long ago, getting rid of manure was an ordeal, according to University of Minnesota extension educator Jill Sackett, but those times are long past.

[Ethanol a 'step' to next stage](#) (Mankato Free Press). Corn ethanol is not an efficient source of biofuel and diverts food to fuel, admits U.S. Rep. Tim Walz. But, he said, those who want to kill the industry would be preventing the next wave of cellulosic-based fuels.

[High-voltage power lines could criss-cross Minnesota](#) (Minnesota Public Radio). A power line company wants to build a massive power line across seven states, including Minnesota.

[Making Juhl the little wind farm that could](#) (Minneapolis Star Tribune). Eyebrows in the energy industry rose last month when retired Gen. Wesley Clark, a former commander of NATO forces in Europe and a one-time Democratic presidential candidate, joined the board of little Juhl Wind of Woodstock, Minn.

[The Great Stimulus Scramble](#) (Minneapolis Star Tribune). Agencies and businesses are competing for millions in federal funds heading to Minnesota. Will decisions to pick one project over another be made wisely?

[Panel weighs plan to take over parcel in Itasca County](#) (Minneapolis Star Tribune). Conservationists say a 292-square-mile land easement in Itasca County would protect jobs and the environment, but legislators will have the final say on spending \$51 million.

[Trail system agreement before county board](#) (New Ulm Journal). An agreement that would form a group that could design and build a cross-county trail is before the Brown County Board of Commissioners on Tuesday morning.

[Blaine landowner protests his wetlands' industrial designation](#) (Minneapolis Star Tribune). He says the land, once part of a proposed Vikings stadium site, is worthless. Public officials disagree.

[VanDerPols plant seeds of a sustainable kind](#) (Advocate Tribune). When not raising cows, pigs, chickens and planting vegetables on their farm, Jim And LeAnn VanDerPol occasionally take the time plant seeds in the minds of youth.

[Conservation agencies face big cuts](#) (MN Daily). The cuts could be nearly 23 percent, which some say is disproportional.

[What's in the stimulus package for farmers?](#) (MinnPost). At more than 1,100 pages, the economic stimulus package is still being unpacked by interest groups and affected parties across the country, including farmers and rural advocates.

[Pawlenty says he'll accept stimulus aid for Minnesota](#) (Minneapolis Star Tribune). Despite his criticism of it as "a meandering spending buffet," he said in Washington that states have a responsibility to use it.

[Pawlenty moving to abolish Environmental Quality Board](#) (MinnPost). Gov. Tim Pawlenty will unveil plans this week to move the Environmental Quality Board (EQB) to the Minnesota Pollution Control Agency (MPCA) and abolish the 35-year-old board that, despite its lofty mission to oversee environment policy, has shown little willingness to assert leadership.

[DNR plans new watershed management division](#) (Minnesota Public Radio). The Minnesota Department of Natural Resources plans to create a new division focused on watershed management.

*Water, the Hub of Life.*

*Water is its mater and matrix, mother and medium.*

*Water is the most extraordinary substance!*

*Practically all its properties are anomalous, which enabled life to use it as building material for its machinery.*

*Life is water dancing to the tune of solids. – Albert Szent-Gyorgi (1972)*

**The Minnesota River Watershed Alliance (Watershed Alliance) is an organized network of citizens, public agencies, and private organizations dedicated to communicating the benefits of an ecology healthy Minnesota River Watershed to others and are actively working towards its improvement and protection. We meet four times a year and encourage landowners and recreational users of the river to be part of the effort. For more information on the Watershed Alliance:**

<http://www.watershedalliance.blogspot.com>

Thanks,

Scott

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