

MPCA approves \$6 million in grants for water quality projects

St. Paul, Minn. -- A demonstration project on reducing sediment in Heron Lake in southwest Minnesota. Community cleanups in the Minnesota River Valley in central Minnesota. Implementing practices to reduce bacteria levels in the North Cannon River in southeast Minnesota.

These are a few examples of water quality projects recently approved for funding by the Minnesota Pollution Control Agency (MPCA). The funding originated from the federal government, as part of the Clean Water Act Section 319 program. The MPCA approved \$6.15 million in grants. Of that total, \$2.7 million will go toward developmental, education or applied research projects. An additional \$3.4 million will go toward implementing Total Maximum Daily Load (TMDL) projects, which identify sources of pollution, the amounts of pollutants and how to reduce the pollutants to a level that allows rivers and lakes to meet water quality standards.

"Clean water, for drinking and recreation, is essential to Minnesota's ecosystem and economy. These grants represent the collaboration among government agencies and local partners, and we are striving to change how we live and work so we can ensure a legacy of clean water for future generations," said Rebecca Flood, Assistant Commissioner for the MPCA. "These projects will help improve water quality, benefiting individual communities and the state as a whole."

The agency approved funding for the following development, education or applied research projects:

- University of Minnesota: \$286,128 for Alternative Designs for Agricultural Drainage Ditches
- Ramsey-Washington Metro Watershed District: \$89,200 for Permeable Reactive Barriers for Phosphorus Removal
- Minnesota Department of Agriculture: \$183,766 for Cottonwood River Native Vegetation Water Quality
- University of Minnesota: \$719,468 for A Decision Support Tool to Restore Impaired Waters
- Heron Lake Watershed District: \$16,500 for a Heron Lake Sediment Reduction Demonstration Project
- University of Minnesota - Water Resources Center: \$285,970 for Quantifying Phosphorus Load Reductions from Street Sweeping and \$298,175 for New Tools to Support TMDL Phosphorus Reduction Plans
- University of Minnesota: \$404,000 for Enhanced Filter Media for Removal of Dissolved Heavy Metals and Phosphorus from Stormwater Runoff
- Friends of the Minnesota Valley: \$110,000 for Minnesota River Community Clean-Ups for Water Quality
- Minnesota Board of Water and Soil Resources: \$341,605 for Side Inlet Controls to Improve Water Quality

In addition, the MPCA approved the following projects that focus on best management practices for restoring waters:

- Rice Creek Watershed District: \$344,200 for the Hardwood Creek TMDL Implementation Project
- Rush River Watershed: \$340,000 for the Rush River TMDL Implementation Project for Fecal Coliform
- Scott Watershed Management Organization: \$475,000 for Minnesota River Tributary Phosphorus and Flow BMPs
- Kanabec County Soil and Water Conservation District (SWCD): \$109,750 for Groundhouse Fecal Coliform and Biota (Sediment) Implementation Project
- Dakota County SWCD: \$66,000 for the North Cannon River Bacteria Reduction Project
- Shingle Creek Watershed Management Commission: \$300,000 for Twin Lake Wetland 639 Nutrient Export Reduction
- Renville County: \$205,186 for the Lower Minnesota River Dissolved Oxygen Elevation Project

- Redwood-Cottonwood Rivers Control Area: \$175,575 for the Redwood River Watershed Nonpoint Pollution Reduction Project
- Southeast Minnesota Water Resources Board: \$900,000 for the Southeast Regional Grant for Water Quality
- Chisago County: \$190,000 for the North Branch Sunrise River TMDL Implementation Plan
- Shingle Creek Watershed Management Commission: \$82,500 for Crystal Lake Nutrient TMDL Alum Treatment
- Carver County Land and Water: \$230,000 for Burandt Lake Excess Nutrient Implementation Plan

For more information, go to the MPCA web site at <http://www.pca.state.mn.us/> or contact Sara Johnson, Section 319 Coordinator for the MPCA at 651-757-2473 or by e-mail at sara.johnson@state.mn.us

Mussel Hike the Chippewa River on September 12th

Join us on September 12th for a fascinating presentation and hands-on experience on the mussel world in Minnesota. Mike Davis and Bernard Sietman of the MN Department of Natural Resources (DNR), experts in this field will give a close-up view of this rarely seen and understood native species. The event is free and suitable for all ages.

- September 12th (Saturday) at 9:30 a.m. A mussel hike in the Chippewa River at the Highway 40 Bridge - Lentz Landing. Wade in the water to collect and identify mussels. Be prepared to get wet!

Mike Davis has worked for the MN DNR since 1987 and specializes in freshwater mussel ecology, in particular on the Mississippi River. Bernard Sietman has an extensive background in mussel ecology as well and has written the Field Guide to the Freshwater Mussels of Minnesota. Together, Davis and Sietman are the leads for the Minnesota Statewide Mussel Survey.

Found across the globe, freshwater mussels or clams reach their greatest diversity in North America at around 300 species. Mussel populations have seen a decline in abundance and diversity because of human influences. This devastating loss is the result of dam construction, stream channelization, water pollution and sedimentation, over harvesting, and the introduction of exotic zebra mussels.

Mussels are considered to be the biological indicators of a river's health and increasingly being regarded as the aquatic "canaries of the coal mine." They are an important part of the ecosystem by providing food for fish, birds, and mammals. They have evolved a unique parasitic reproductive system with fish serving as the host during the larval stage of the mussel.

This event is sponsored by the Chippewa River Watershed Project (CRWP). The CRWP seeks to improve water quality and flooding problems within the Chippewa River watershed while promoting a healthy agricultural, industrial, and recreation-based economy for the region. The CRWP is a cooperative partnership and citizen based approach set on improving water quality in the Chippewa River and its tributaries. This project formed in 1998 in response to the growing concern over the health of the Chippewa River Watershed. Today, the CRWP offers cost-share and incentive dollars to landowners for conservation practices to improve water quality.

Call 320-269-2139 ext 120 or email jennifer@chippewariver.com with questions.

17th Annual Kuehnast Lecture By Mark Seeley

This year's lecture will be presented by Dr. Dennis Baldocchi, Chair of the Ecosystem Science Division at UC-Berkeley. Dr. Baldocchi is an internationally known biometeorologist, recognized for outstanding achievement in 2009 by the American Meteorological Society. He is also a Fellow in the American Geophysical Union and one of the most widely cited researchers in the field of terrestrial ecosystems and their interactions with atmospheric processes. In the context of the new Land and Atmospheric Science Graduate Program of the Department of Soil, Water and Climate, the appearance of Dr. Baldocchi as our Kuehnast Lecturer is an excellent fit. The title of his presentation is "Breathing of the Biosphere: How Physics Sets the Limits and Biology Does the Work."

The 17th annual Kuehnast Lecture will be held on Thursday, October 15, 2009 at 3:30 p.m. in Room 335 Borlaug Hall on the University of Minnesota St. Paul Campus.

The lecture series is in honor of our colleague and friend Earl Kuehnast, Minnesota State Climatologist (1968-1986). In 1992 the Kuehnast family established an endowment directed toward climatology, atmospheric and earth sciences. Their continued support, along with yours, is most appreciated, as the endowment funds support this lecture as well as the Climatology Library, and general operations of the Minnesota Climatology Working Group. More information about the endowment, including a history of the annual lecture event can be found on our web site at: http://climate.umn.edu/doc/journal/kuehnast_lecture/

The Mississippi River Basin and Delta Hypoxia: The DEAD ZONE: Jazz, Blues and Rebirth of the Gulf

Clean Water Network is joining forces with the Sierra Club, the National Sustainable Agriculture Coalition and the Gulf Restoration Network in organizing this landmark regional summit on October 2-3, on Mississippi River Basin environmental issues. The Summit will focus on developing strategies to address the enormous environmental challenges we face from the expanding Dead Zone in the Gulf.

Yes We Can? - By Erik Ness, The Nature Conservancy Magazine

Could the Conservancy and partners get Minnesotans to vote yes for clean water?

It's just two hours before the polls close in Minnesota, and the campaign manager is lost.

Peering beyond the crack in the windshield of his gold SUV, Ken Martin struggles to navigate around Minneapolis construction. The car radio is breathless over Barack Obama's gathering blue storm. Martin's Blackberry chirps ecstatically as messages pour in from far-flung political friends. Already people are celebrating a historic election. But Martin is deep in his own end-game: He's got nearly 200 people in the field, and — most important — the polls are still open. Voters are still in play.

Martin is in charge of another historic, albeit lower-profile, candidate: the Clean Water, Land and Legacy Amendment, a ballot measure that could raise billions for conservation in Minnesota. Ten years in the making, it is the largest referendum of its kind in U.S. history. Exhaustive research had shown that it has broad nonpartisan support. But after 10 months of campaigning, Martin still can't say whether voters will stay in the booth long enough to read the ballot question and pencil in Yes, or simply leave after choosing McCain or Obama. "Keeps me up at night," he confesses.

"This is the time of the campaign where there's nothing else you can do," he adds, wanting nothing so much as to do just a little more. And so here he is on the waning edge of election night trying to get to the one place where he might yet sway a few more voters.

For the rest of the article go to:

http://www.nature.org/magazine/autumn2009/features/voteyes_multi1.html

Our Plastic Legacy Afloat – New York Times Editorial

Until recently, the earth had seven continents. To that number, humans have added an eighth an amorphous, floating mass of waste plastic trapped in a gyre of currents in the north Pacific, between Hawaii and Japan. Researchers have estimated that this garbage patch may contain as much as 100 million tons of plastic debris and is perhaps twice the size of Texas, if not larger.

Across the world's oceans there are still many more millions of tons of floating plastic, most of it originating from land, not ships. All of this solid waste is bad news. It traps as many as a million seabirds every year, as well as some 100,000 marine mammals.

Now comes what could be more bad news. A new study, announced at a recent meeting of the American Chemical Society, suggests that plastics in seawater break down faster than expected. As they do, they

apparently release contaminants, including potentially harmful styrene compounds not normally found in nature. This was not merely a laboratory finding. The author of the study, Katsuhiko Saido, a scientist at Nihon University in Japan, found the same chemical compounds in seawater samples collected near Malaysia, the Pacific Northwest, and in the northern Pacific.

The effects of these broken-down plastics on marine organisms is as yet unknown, and they will be harder to measure than the damage that plastic refuse does to sea-life. But adding to the contaminant load of the oceans cannot be a good thing.

What we are seeing here is yet another of the large-scale, potentially tragic, uncontrolled experiments that humans have conducted on their environment without intending to. And though we cannot do much about the millions of tons that have already been sent to sea, we can at least begin to ask ourselves, when we get ready to pitch a plastic container, where is this likely to end up?

Fresh – a new movie

Fresh, a new movie celebrating the farmers, thinkers and business people across America who are re-inventing the food system, will be presented during a special screening in Montevideo, MN on Thursday evening, September 17th at 7:PM at The Montevideo community Center (550 S. 1st ST).

Fresh is a documentary that uses character-driven narratives to show how people are working in their communities to create a healthy, sustainable food system. Among those featured are: Will Allen, the urban farm pioneer and founder of Growing Power in Milwaukee, Wis.; Joel Salatin, sustainable livestock farming innovator; and David Ball, a supermarket owner who reinvented his business and revitalized the local food economy by partnering with area farmers. To view a trailer of Fresh, see www.freshthemovie.com.

This film screening will be followed by an audience discussion involving local farmers. For more information, contact the Land Stewardship Project's Tom Taylor by calling 320-269-2105 or e-mailing taylor@landstewardshipproject.org.

The screening and discussions are sponsored by the Land Stewardship Projects Farm Beginnings and Community Based Food Systems programs. The Farm Beginnings program has for the past 12 years offered training in innovative farm management, marketing, planning and decision-making. For more information on the upcoming Farm Beginnings classes in Spicer, Minn., call Nick Olson at 320-269-2105 or visit www.farmbeginnings.org.

LSPs Community Based Food System program works to develop regionally-based production and consumption of foods in, among other places, western Minnesota. More information on this program is available by calling Tom Taylor at 320-269-2105.

These film screenings are free and open to the public. Please feel free to share this message with your neighbors and friends.

The Future of Environmental Education in North America

On October 8th from 1:30 to 4:00 p.m. (advanced registration is required) you have the opportunity to see and hear the plenary session, *The Future of Environmental Education in North America*, from the annual environmental education conference in Portland, Oregon via webcast. The North American Association for Environmental Education is streaming this session live and you're invited to gather with fellow educators at the MN Pollution Control Agency in St. Paul to watch the webcast and participate in a discussion following the presentation.

The webcast session from 1:45 to 3:15 p.m. is being presented by the following environmental education leaders from Canada, Mexico, and the United States:

- Elizabeth Kilvert - Research and Strategy Advisor for Environment Canada
- Ruth McCully - Director of US EPA's Office of Children's Health Protection and Environmental Education

- Salvador Morelos Ochoa - Head of the Center of Education and Training for Sustainable Development in Mexico

It's a great opportunity to hear what the leaders have to share, and to discuss the implications and opportunities with fellow educators. We hope you'll join us. *Discussion Facilitator: Britt Carlson, Minnesota Pollution Control Agency*

THERE IS NO COST FOR THIS SESSION BUT REGISTRATION IS REQUIRED. There are limited spaces available. To register, please send an e-mail to ee-events@pca.state.mn.us (preferred) or call 651-757-2070. (If you do not receive a confirmation notice, please notify us.) The webcast and discussion location is in the MN Pollution Control Agency's lower level boardroom, 520 Lafayette Road, St. Paul. This is open to all working in the environmental and/or education field.

This is one of the Environmental Education (EE) Capacity Building efforts hosted by the Minnesota Pollution Control Agency. Environmental Education Capacity Building is developing effective organizations and individual leaders in order to achieve comprehensive EE programs at the state and local level.

Rural Advantage Seeking Cover Crop Sites

Rural Advantage, in partnership with Practical Farmers of Iowa, is seeking agricultural producers interested in utilizing cover crops for the 2009 fall harvest season. Cost-share dollars are available.

Cover crops are capable of providing multiple benefits when placed on the landscape. These benefits include: increased water quality, decreased soil erosion, increased carbon sequestration, increased soil organic matter, and increased soil nutrients. Common cover crops for Minnesota include: annual rye, oats, winter wheat, and hairy vetch. Research is currently being conducted in Minnesota on aerial seeding of annual rye into corn fields in late August to early September. What is more commonly seen are producers utilizing cover crops after field pea or sweet corn harvest as well as in other cropping systems.

Rural Advantage is seeking farmers willing to establish up to 20 acres of cover crops this fall. Funding is available for up to \$20 per acre [\$400 maximum per farm]. Participating farmers may plant the cover crop of their desire, but must be willing to be a field day site. Simple reporting will also be necessary as the sites will be considered research and demonstration sites. All 2009 sites should be planted during the month of September. We will also be looking for additional sites for 2010 and 2011.

To sign up or for more information, please contact the Rural Advantage office at 507-238-5449

Pastures A' Plenty Farm Tour

"Carbon sequestration is what we need to learn to think of as good farming." Jim VanDerPol, Pastures A' Plenty farmer

Carbon dioxide and other greenhouse gasses are increasing in the Earth's atmosphere, leading to changes in our global climate. The grasses and legumes found in pastures here in the upper Midwest are highly effective at removing excess carbon dioxide from the air and storing it in the soil, a phenomenon known as "carbon sequestration." On September 26th Land Stewardship Project and Sustainable Farming Association of Minnesota will be holding a farm tour at Pastures A' Plenty to demonstrate how working family farms can help reduce global warming and supply the community with healthy food with the use of a grass based farming system.

This special on farm event will start at 2:00 PM with a farm walk led by Jim VanDerPol to explain the grass based farming system that is used at Pastures A' Plenty. After this tour/walk there will be a working demonstration on how to construct a rolling chicken house station to best raise chickens on pasture. We will then hear about Pastures A' Plenty's innovative approach to supplying their customers with nitrate-free brats. Following this will be a local foods dinner with refreshments, featuring those nitrate-free brats,

and a discussion about the positive impacts that grass based farming can have on global warming and the work that he is doing at Swan Lake Research Farm and the soils lab in Morris.

Pastures A' Plenty about 9 ¾ miles north of Clara City, or 1 ¼ mile south of Highway 40 on Chippewa County Road 2. The address is 4075 & 4077 110th Ave NE in Kerkhoven, MN.*

Pastures A' Plenty is a sustainable grass based pork, chicken, beef and replacement dairy cattle operation that has been in the VanDerPol family since 1952. Farmed by Jim and LeeAnn VanDerPol since 1977, Pastures A' Plenty farm and their marketing operation now supports two West Central Minnesota families including Josh and Cindy VanDerPol and their family.

Attendance is limited for this special on farm event. Please contact Tom Taylor at ttaylor@landstewardshipproject.org or 320-269-2105 to make your reservation.

Events:

September 12th (Saturday) is a **Mussel Hike on the Chippewa River** starting at 9:30 a.m. at the Lentz Landing on Highway 40 northwest of Montevideo. DNR Mussel Experts, Bernard Sietman and Mike Davis will give a close-up view of the native species. Learn about mussels and get a chance to wade the river and get a hands-on experience. Be prepared to get water. Call with questions 320-269-2139.

September 13th (Sunday) is the **Rally for the Valley 5K Fun & Kids Run** starting at 9:30 a.m. at Fort Snelling State Park. This is a USATF-certified race course; outdoor recreation for the whole family along with scenic setting and wildlife viewing. Register now at active.com or contact Mary Anderson at mary@andersonraces.com. Sponsored by the Friends of Minnesota Valley.

October 6th & 7th (Tuesday and Wednesday) is the **Nobel Conference – H2O Uncertain Resource** at Gustavus Adolphus College in St. Peter. This conference will examine the current state of world water resources. Immediate threats to the health of rivers, lakes, estuaries, coastal waters, oceans, and all forms of aquatic environments will be confronted by leading scientists. Environmental ethics and potable water as a basic human right will be examined alongside human tragedy resulting from contaminated resources. For more information, <http://gustavus.edu/events/nobelconference/2009/>

October 26th – 27th (Monday and Tuesday) is the **Water Resources Conference** at RiverCentre, St Paul. The Minnesota Water Resources Conference presents innovative and practical water resource management techniques and highlights research about Minnesota's water resources. For more information, <http://wrc.umn.edu/waterconf/index.htm>

November 7 (Saturday) is the **Crisis as Opportunity: Redesigning the Good Life Conference** from 8:30 a.m. to 3:30 p.m. at the School Sisters of Notre Dame Mankato Provincial House Conference Center (170 Good Counsel Drive. For more information: <http://mavdisk.mnsu.edu/kudels/thegoodlife.pdf>

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

Water Quality Articles:

[Afield: Hen-of-the-woods mushrooms a treat to find](#) (Minneapolis Star Tribune). The large, delicious mushroom can be found at this time of year, and often in the same place annually.

[Groups say BWCA air cleanup plan too lenient](#) (Minnesota Public Radio). Some environmental groups are asking the federal government to pressure Minnesota to set stricter limits on air pollution to protect the Boundary Waters and Voyageurs National Park.

[New grant program could trigger hundreds of conservation projects](#) (Litchfield Independent Review). With more than \$3.7 million in funds available, a new grant program in Minnesota could trigger hundreds of conservation projects throughout the state.

[Position opens on Heritage Council](#) (Minnesota Outdoor News). One of the original members of the Lessard-Sams Outdoor Heritage Council has stepped down from his post.

[Got a conservation plan? Write it up and get in line](#) (Minneapolis Star Tribune). Courtesy of the state's voters, the Minnesota Department of Natural Resources has \$3.7 million to divvy up for new conservation projects -- and they're ready to get started.

[Biogas plant coming to Welcome](#) (Mankato Free Press). The tiny town of Welcome is hoping to reap big benefits from barnyard manure.

[Tar-sands oil standoff brews in Minnesota](#) (St. Paul Pioneer Press). The fight over global warming and Canadian oil is heating up, and Minnesota, which gets 80 percent of its oil from Canada, is sitting on the griddle.

[Good Question: When Will U.S. Ban Old Light Bulbs?](#) (WCCO TV). A ban on the sale of incandescent light bulbs in Europe is now underway as part of an effort to conserve energy by only selling more efficient bulbs. Will the U.S. ban the old-style light bulbs?

[Southern Minnesota wind farm receives \\$28 million](#) (Worthington Daily Globe). The Moraine II Wind Farm, located in portions of Pipestone and Murray counties, has been awarded more than \$28 million from the American Recovery and Reinvestment Act program.

[DNR investigates concerns about squirrel numbers](#) (Minnesota Outdoor News). DNR officials likely will take a hard look at squirrel seasons in the state in coming months, the result of the belief in some quarters that squirrel populations are decreasing.

[Researchers' efforts helping revive prairie chicken population](#) (Minnesota Public Radio). Prairie Chickens nearly disappeared from the Minnesota landscape as prairie habitat became farmland, but the birds are making a comeback on the Glacial Ridge National Wildlife Refuge near Crookston.

[Flight of the butterflies](#) (Minneapolis Star Tribune). A hands-on chance to help study one of the great mysteries of nature, the yearly migration of the monarch butterfly.

[DNR to purchase acorns, cones for seedlings](#) (Associated Press). The Minnesota Department of Natural Resources is looking for ripe cones and acorns whose seeds could someday become oaks and pines in the state's forests.

[Fish Fence is a Shocking Failure: Is it time to zip up the Great Lakes?](#) (Huntington Post). The story of the slow-motion effort to prevent invasive giant Asian carp from infiltrating and destroying the Great Lakes ecosystem is, frankly, embarrassing and pitiful.

[Commentary: 'Green' can be an illusion in construction](#) (Minneapolis Star Tribune). Building certification programs don't necessarily see the forest for the trees.

[Minnesota nature writing lives on with Sue Leaf's work](#) (MinnPost). The Chisago lakes area, where Sue Leaf lives, is not exactly a hotbed of literary action.

[Final phase of arsenic cleanup starts today in Minneapolis](#) (Minneapolis Star Tribune). Crews began removing contaminated soil at nearly 500 houses in south Minneapolis in what may be the end of a lengthy cleanup.

[John Hottinger: Under threat: Waters where it all begins](#) (Minneapolis Star Tribune). Small streams that feed the others stand to lose their federal protections.

When the well is dry, we know the worth of water. – Benjamin Franklin, Poor Richard's Almanac

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>

Please register at the Minnesota River Watershed Alliance's bulletin board at <http://mail.mnsu.edu/mailman/listinfo/mrwa> to receive regular updates on what is happening in the Minnesota River Watershed.

Thanks,

Scott

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