RIVER TALK

THE MINNESOTA RIVER CURRENT

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CLEAN WATER, LAND AND LEGACY AMENDMENT

On November 4th, a majority – 56% - of Minnesotans felt a need to give something back to its natural and cultural resources. They voted for clean water, more hunting and fishing opportunities, better management of our environment along with a diverse selection of art and historical programs. They did it at a time when the economy seems to have hit a brick wall. In essence, they did it for future generations. This says a lot for Minnesotans.

Long-time river advocate, Scott Sparlin of New Ulm said it affirms what many people working with natural resources in the Minnesota River Basin have experienced first hand. "The vote margin in favor of the amendment clearly displays that residents are genuinely concerned about the future of our natural resources and in particular our surface water," states Sparlin. "Here in the Minnesota River Watershed, we have witnessed these genuine concerns over the past two decades."

According to the ballot box question, the "Clean Water, Land, Cultural Heritage and Natural Areas Amendment," *will dedicate funding to protect our drinking water sources; to protect, enhance, and restore our wetlands, prairies, forests, fish, game and wildlife habitat, to preserve our arts and cultural heritage; to support our parks and trails; and to protect, enhance, and restore our lakes, rives, streams and groundwater by increasing the sales and use tax rate beginning July 1, 2009, by three-eights of one percent on taxable sales until the year 2034.*

For people working on the ground in the Minnesota River Watershed, it means adequate funding to continue keeping an eye on our natural resources including rivers. "One benefit of these funds will be to ensure long-term water quality and flow monitoring at each of the major tributary outlets and Minnesota River mainstem sites," reports Pat Baskfield, MPCA hydrologist. "The current monitoring network in the basin is very good. Passage of the amendment ensures the continuation of this work."

Minnesota River near Granite Falls

Statewide the vote was 1,635,046 in favor compared to 1,141,540 opposed. Blue Earth County had the highest percentage at 68% in the state, with most counties in the MN River Basin hitting at least 50 percent.

Facts on the Amendment:

- To have passed, it needed to receive a majority of votes from those who went to the polls. Anyone who didn't vote on the amendment had it registered as a no.
- Raised the current sales tax (6.5%) by 3/8th of a percent or 38 cents for a $100 purchase.
- Revenue to be used to fund environmental conservation efforts and the arts.
- Expected to generate between $250 to $300 million per year, according to the Minnesota Department of Revenue.
- 1/3 or 33% goes to clean water – to protect, enhance and restore water quality in lakes, rivers and streams.

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DID YOU KNOW?

In 1969, a housewife by the name of Marian Havlik found herself learning about the study of mollusks or malacology through her daughter's fifth grade science fair. Today, Havlik is widely known as the "Clam Lady of American Rivers" for her research on mussels throughout the United States.

She became known as the "clam lady" by the U.S. Corps of Engineers while fighting them over the endangered Higgins Eye mussel. According to Havlik, she warned the Corps not to dredge the East Channel at Prairie du Chein in the 1970s, one of the best known habitats of the Higgins Eye. "They dredged despite my warnings, and afterwards I found hundreds of Higgins Eye shells in the dredge spoil."

Havlik took action by writing every federal agency she could think of and even President Jimmy Carter. "All hell broke loose and, after Congressional inquiries into the matter, the Army Corps realized that never again could it dredge a channel without first doing a survey of mussel species in the path of the dredge boat. As it happened, there was no one in the Corps who could identify a mussel species."

In 1977, Havlik founded the company Malacological Consultants to do field surveys on rivers like the Rock in Illinois, the Ohio from Paducah to Cairo, the Meramec in Missouri and the Elkhorn in Nebraska. "Many of our river systems are in such bad shape," she cautions. "In 1977, we looked at the Minnesota River near Savage. We found shells from 32 species and NOT ONE live specimen."

Havlik says the cumulative effect as a result of barge traffic, dredging, industrial pollution, erosion and agricultural impact is what's killing the mussels.

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The Minnesota River Watershed Alliance

Tom Kalahar has worked as a district technician for the Renville Soil and Water Conservation District for almost thirty years. In that time, he helped enroll thousands of acres into conservation easements and put hundreds of conservation practices on the ground. Today, Renville County has the most acres in the Conservation Reserve Enhancement Program (CREP) than any other county in the Minnesota River Basin.

What is the biggest issue affecting quality of life in the Minnesota River Watershed?

I think the biggest issue is the same old issue Big Agriculture. We can see what happens when the price of grain goes up, the move by the Ag industry is to bring more land into row crop production. The most recent spike in grain prices has increased the pollution of the Minnesota River and will continue to do so. High grain prices = more land into production = dirty water and less wildlife habitat. The governments, Federal/State and County governments are not real sincere in their support of conservation. Agra business still jerks their chains and drives the Federal Farm Bill, State and local conservation efforts. Conservation funding is at a 30 year low in Minnesota. Yet as a State we have supported and encouraged more corn production by promoting the ethanol industry. More pattern tile each year, more farmstead and fence line removal, CRP removal and marginal land brought into production. All of these because the governments reward people for working lands that should not be in row crop production. Our landscapes can not look the way they do and have a healthy river environment. Fundamental change is needed in Federal Farm Policy and the state of Minnesota has to get serious about reversing the negative impacts of agriculture on our rivers lakes and streams.

How do we connect the river to the public?

Start teaching our children that not only is it bad business to destroy the rain forest it is equally as bad to convert 99.9% of prairie and drain 95%+ of the wetland!!! We just don't do a very good job of admitting that we have made some huge mistakes in the past and the present. I can get an answer from most students on the importance of a rain forest thousands of miles away but none of them know a damn thing about their own back yard!!!! Education is the key!!!! We can change our behavior but first we have to admit we have a problem.

How do we get youth involved in issues affecting the Minnesota River?

Same as question two!! Kids only know what we teach them. They don't know what is important unless we (adults) think it is important. Out here it is all production agriculture and very little to no conservation taught in the class room.

How do we get different or competing interests to listen to each other in a safe environment?

Here again we have to be honest and truly want to fix the problem. If a farmer can get $$$$$/acre planting corn on marginal land through farm programs and crop insurance. Then we need to compete with that or stop the craziness of the farm program payment process. Conservation will only be achieved through paying people to practice conservation.

What would you like as your legacy when it comes to your work in the Minnesota River?

Leaving as many perpetual easements both riparian and wetland restoration as possible on this agriculture dominated landscape. Protection of the Minnesota River valley and it rock outcrops. Raise a generation of kids that get it when it comes to how we need to live a sustainable life style. Pass this earth on to other generations in better shape then when we inherited it. Change the federal farm policy in the country to be the solution and not the problem.

What do you see as the role of the Minnesota River Watershed Alliance when it comes to improving, protecting, and restoring the Minnesota River Watershed?

Education, Education, Education and then some more education!!!!!! Get into the schools!!!! Kids can learn what adults are not likely to.

Tom Kalahar (right) talks to a landowner

Tom Kalahar has been a leading advocate in the effort to preserve rock outcrops in the MN River. In 2007, a Legislative-Citizen Commission on Minnesota Resources (LCCMR) grant provided $563,000 to help protect 200 acres of rock outcrops through perpetual easements in the basin.

River Chronicles

By Tim Krohn
Mankato Free Press Staff Writer


John Fritsche

In 1854, John Fritsche's great-great grandfather settled on the banks of the Minnesota River outside the new town of New Ulm. Today, the 68-year-old Fritsche works around the yard on the same spot along the Minnesota River.

"We had hogs and cattle here until the '50s. In '63 we built a turkey barn and raised them 'til '83," Fritsche said. "Then we raised 100 geese a year and sold the geese and feathers until 1997 when the flood came. The waters came up and I decided not to do that anymore. We had water in seven of nine buildings.

Fritsche's is one of many stories Scott Kudelka, Kim Musser and Rick Moore believed should be preserved to chronicle the history and changes in the Minnesota River Valley.

"We're creating an interactive Web site that looks at people who have a longtime history of the river. Their viewpoints on what the river looked like, what it looks like now. Their connection to the river," said Scott Kudelka of the Water Resources Center, housed at Minnesota State University.

Musser, who headed up the project, said they are building a web site with a broad array of interactive features. Several video interviews with people such as Fritsche already have been done.

"We want to have an interactive impaired-waters map of the Minnesota River Basin. People can see which waters are impaired and with what," Musser said.

Another project being worked on is an interactive site that follows the journeys of explorer Joseph Nicollet in 1838. It will show Nicollet's journal entries describing tributaries as they entered the river with modern 360-degree panoramic images of the same spots today.

Moore, a geographic information specialist, has been compiling a host of maps and photos, going back more than a century, to provide images of the river and the area around it has changed.

Another project will show how a Mapleton Township farm has changed from the late 1800s to now.

"They had small grain, wetlands, pasture, a little corn, livestock. It shows the history of drainage over time and now it's mostly corn and soybeans," Musser said. The change in agricultural landscape is fairly typical, but the Mapleton farm was picked because there was a wealth of information available.

"We found a wonderful thesis from the 1950s where this guy interviewed farmers and had the history of the farms and the drainage records going to the 1800's, Musser said.

Kudelka said the $50,000 in state grants that launched the project are exhausted and the center is hoping to get more money to expand the project.

"We're trying to get a diverse group represented. We have a traditional farmer and an organic farmer. People who canoe the river. People who know the history," Kudelka said. "One area we'd like to do more with, that we haven't done yet, is interviewing Native Americans."

Fritsche hopes the interviews he and others did for the Web site will spur interest in the river.

"I think it's a good idea. If people look on the Web site, they might get interested in the river."

Fritsche has seen positive improvements along the river, including a return of eagles, laws that prevent new construction in the floodplain and other programs that have improved the river.

And he's seen negative impacts, particularly, he said, the expansion of highly efficient drainage systems that bring a lot more water into the river more quickly.

"The only way to make it better is to find ways to keep more of that water up on the hills longer before it gets down into the river"

He's seen the power of high-flowing water firsthand, through devastating floods and when the river, in the early '90s, carved out a new channel and made his 52-acre peninsula – formerly a farm field – into an island.

He says he might sell the island to the Fish and Wildlife Service, but for now he likes holding on to it.

"I enjoy sitting in the chair and watching the pretty colors of the trees in the fall and just enjoying it."


John Fritsche in Riverside Park, New Ulm

Up in Gaylord, Brooke Patterson and Joel Wurscher are excited to be part of the on-going effort to improve water quality of the Minnesota River. Joel took on the coordinator role of High Creek Watershed Implementation Project in August of 2007 and Brooke came on board in May as the coordinator for the Rush River Watershed Implementation Project.

Both recognize a lot of work has been done in the Minnesota River Watershed but also realize everyone needs to be involved. "It's fun to see people that are as passionate as I am about the environment," exclaims Joel. "I just wish there were more out there."

They also see barriers for getting the public onboard with the changes needed to restore the Minnesota River. Brooke feels the biggest challenge is motivating people to make land use decisions that will help improve water quality. "People have to make these changes on their own time when they are ready to commit to them," relates Brooke. "Changing is hard for many people, including myself."

Brooke and Joel arrived in Sibley County on two widely different paths. For Brooke, it started in rural Tennessee where she grew up on former tobacco farm that had been converted to hay and cattle.

After graduating from Guilford College in Greensboro, North Carolina with a degree in Environmental Studies, she moved to New Jersey with her husband. Brooke worked for the Atlantic County Utilities Authority (ACUA) as a Clean Communities Coordinator and Environmental Research Assistant. In that position she was responsible for a variety of "Adopt-A" programs, educating the public about recycling, and organizing a lake cleanup event.


Brooke Patterson

Joel grew up in Hutchinson where he embraced the outdoors by spending as much time as he could hunting and fishing. While attending Minnesota State University in Mankato, Joel worked for three years at the Water Resources Center on a diverse selection of projects. These projects included a fish and macroinvertebrate study, population study of ring-necked pheasants and a wetlands monitoring program, each overseen by agencies like the Minnesota Department of Natural Resources and the Board of Water and Soil Resources.


Joel Wurscher

In their current positions, Joel and Brooke work closely with the Minnesota Pollution Control Agency, who provides oversight. As their project manager, Scott MacLean says each of them have done a nice job of stepping into existing projects and making them their own. "They were both put in the unenviable position of having to write final reports for completed phases of their respective projects immediately upon assuming their coordinator positions," offers MacLean.

"Joel and Brooke complement each other well as they each have different strengths and experiences that they bring to their work," MacLean said. "They have already done a lot to raise awareness of their projects and the water quality issues facing the Rush River and High Island Creek. I expect that along with Ron Otto, the project technician, they will make a great deal of progress toward protecting and restoring water quality in the Rush River and High Island Creek."

Both Joel and Brooke feel an invested interest in the Minnesota River. According to Brooke, "Everyone deserves to enjoy the Minnesota River, whether by fishing in it, swimming in it, paddling in it or just going on bike rides or walks along it. I would love to see the Minnesota River and the work done to improve its water quality becomes a national showcase for other states." As a diehard fisherman, Joel says, "my interest turns towards promoting this valuable and underrated resource."

One of the most significant places in the history of Minnesota falls just outside the Minnesota River Watershed and directly below Fort Snelling. In the Dakota's eyes, Coldwater Springs is the dwelling place of their powerful god of waters and the underworld. For over 100 years, soldiers at Fort Snelling used it as the source of their drinking water. Recently, it came under the jurisdiction of the National Park Service as part of the Mississippi National River and Recreation Area (MNRRA).

As the largest limestone bedrock spring in the Twin Cities, water flows from it somewhere between 90,000 and 144,000 gallons day. Geologists figure it had been formed by glacier melt channeling through Platteville limestone and at least 10,000 years old. Water flowing from Coldwater Springs stays at a constant 47-degrees year-around and ice-free during the winter. The water cascades downward into a wetland and waterfall before flowing into the Mississippi River.

Besides the Dakota, other Indian tribes including the Anishinabe, Ho Chunk, Iowa, Sauk and Fox saw Cold Springs as a sacred gathering place. Each of these American Indian tribes of the Upper Mississippi area used the spring water for specific ceremonies requiring scared water in a scared landscape. During these ceremonies the tribes camped between Cold Springs and Minnehaha Falls.

The U.S. Army arrived at the confluence of the Mississippi and Minnesota rivers in the fall of 1819. They built the first fort – "New Hope" – on the Minnesota River backwaters but with 20% mortality among the soldiers a new location for their home needed to be found. After following American Indian trails along the Mississippi River bluff, they came upon Cold Springs on May 5, 1820. *It is a healthy situation, about 200 feet above the river, and the water gushing out of a lime stone is excellent. It is called "Camp Cold Water,"* wrote James Duane Doty on July 31, 1820.


Coldwater Springs pool

With the construction of Fort Snelling, soldiers build a limestone well tower and pump house along with expanding the reservoir holding pond. They piped spring water up to Fort Snelling into the 1940s. Over the next decade, Cold Springs and surrounding area became a popular place to visit from people living in Minneapolis. The area was also used during the 20th century as a route for railroad and streetcar lines. At one point in the 1950s, it had been considered for a nuclear power plant site.

In 1960, the U.S. Bureau of Mines fenced a portion of the federal land for Cold War research. For the next twenty-one years, scientists conducted research on an array of health and safety issues for mine workers until the U.S. Congress terminated the Bureau of Mines in a national restructuring effort. By 1997, the campus with all of its buildings had been vacated and the land put up for sale.


Former Bureau of Mines administrative building

The Metropolitan Airports Commission (MAC) planned to purchase the Coldwater Springs area to build an 850 car parking lot for employees and be part of the runaway extension. MAC had voted to buy the land for $6 million. After the economic downturn of 911, MAC put these plans on hold as the Federal government tried to come up with a new plan for this 27 acre historical site.

Other plans for the site have included the construction of a bridge across the Mississippi River. Today, Coldwater Springs features abandoned buildings and structures of various sizes, totaling approximately 165,000 square feet. These buildings include offices, laboratories, garages, maintenance shops, core sample storage sheds, an ore crusher building, along with miscellaneous storage and research structures. They have also been determined eligible for inclusion on the National Register of Historic Places. The plan is now to restore the site to its presettlement state.

"Dreaming big" has been one way to describe the work Rural Advantage is undertaking to improve rural opportunities for agriculture, the environment and community. Located in Fairmont, this recently created nonprofit organization wants to improve ecological health, economic viability and rural vitality through a number of objectives:

- ✓ Advance landscape diversification to improve ecological health, rural vitality and farm profitability,
- ✓ Cultivate a more sustainable approach t agriculture that is diverse, resilient and responsible; and supports natural and agricultural 'systems' thinking,
- ✓ Foster rural economic development that supports rural families and local communities,
- ✓ Promote increased stewardship through education, demonstration and implementation.

To learn more about Rural Advantage, the Madelia Project and other programs go to the web site: www.ruraladvantage.org.

In order to accomplish this, Rural Advantage is working hard to develop what it calls the Madelia Model. The idea behind this model is to create more jobs for a stronger economy, protect the natural environment and help farmers develop alternative crops. According to Linda Meschke, director of Rural Advantage, "It's something we see as a potential state or even national model."

The Madelia Model focuses on alternative energy by promoting perennial crops or "third crops" like native prairie plants to be used as fuel at local biofuel plants along with incorporating the use wind, solar and methane energy. This in turn gives farmers a local market to sell their products and ecological benefits including clean water, carbon sequestration, greenhouse gas reductions, and also improves wildlife habitat and diversity.

By getting beyond an ethanol-only biofuel push, the Madelia Model advocates a more economic and environmental friendly way of reducing our dependence on foreign oil and helping our rural communities grow stronger. "We need to be doing more to conserve energy," states Meschke. "We can't just look at ways to make more and more energy."

Ultimately, the goal of the model is to grow enough biomass in a 25-mile radius around Madelia to support a self-sufficient plant to produce energy. Rural Advantage estimates about 20 percent of the current cropland needs to be converted to high-yielding perennial crops. When you look at what corn produces for biomass it is only 2 tons per acre. On the other hand, several university research projects have found a mix of 16 prairie plants could produce some 250 percent more biomass than many existing crops.

To move the project forward, a pilot microwave pyrolysis energy plant will be built. Here, a giant microwave chamber reduces bales of biomass into oil, ash and gas. According to Meschke, this system has a lot of promise because it's efficient and uses almost no water. Unlike ethanol production or other biomass processes which use large amounts of water.

Linda and her staff – Jeff Jenson, Marketing / Program Assistant and Kate Bresaw, Conservation Agronomist with the University of Minnesota Extension – work with farmers like Dennis Gibson to produce third crops for biomass production. Gibson grows hybrid cottonwood trees northeast of Montevideo. This former sugar beet and livestock farmer started growing these trees 11 years ago and has 21,000 maturing cottonwoods as people look for alternative energy sources.

Gibson began growing trees instead of traditional crops like corn and soybeans for a number of reasons. "We all have hobbies," relates Dennis, "mine are trees and shrubs." He goes on to say, "You get a lot of water quality bang for the buck utilizing trees." With the volatile nature of energy costs, Gibson sees a lot of potential for agricultural biomass. "We call them solar collectors. We need to unlock that energy and turn it into fuel."

Rural Advantage sees the development and implementation of a high performance bioindustrial system as way to increase competitive advantages for businesses and communities, diversify agricultural, revitalize rural society, improve the landscape and water quality, along with other long term benefits.

Freshwater mussels really matter to river's ecosystem

MONTEVIDEO – As far back as the turn of the century, there were "clammers" who dug freshwater mussels in the Minnesota and Mississippi Rivers in search of pearls. Later, they raked the upper Minnesota River to harvest mussel shells in quantities large enough to fill rail cars. They shipped the shells to Muscatine, Iowa, to be made into buttons.

Today the job of hunting for mussels in Minnesota belongs almost exclusively to two men, Mike Davis and Bernard Sietman.

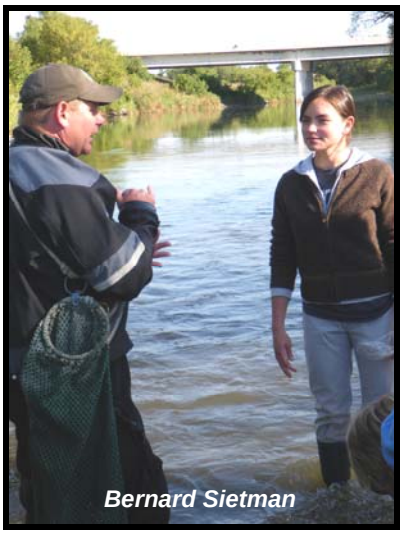
The value of their work might exceed anything all those years of unregulated harvesting ever produced. "Mussels can be the canary in the coal mine," said Davis, as he sloshed in chest waders on Oct. 14 through the chilled waters of the Chippewa River downstream of the Minnesota Highway 40 bridge east of Milan.


Tom Cherveny photo

From left are Katherine Pekarek-Scott, MPCA project manager; Paul Wymar, watershed scientist with Chippewa River Watershed Project, and Bernard Sietman and Mike Davis, both with the Minnesota Department of Natural Resources mussel survey project.

Davis and Sietman, both with the Minnesota Department of Natural Resource's ecological resources division, have been working together since 2002 surveying freshwater mussels in the state. Along with assessing the status of the state's mussels, the two are establishing monitoring sites where the health of individual mussel populations can be tracked over time. They've already established sites in the Mississippi and Cannon rivers. Now they've established a third site in the Chippewa River.

The survey of freshwater mussels in the Chippewa River required going through over 100 different substrata pulled from the river bottom. The process involves using a net to pull up a one-quarter square meter of river bottom, and placing it on the small raft where helpers can sort through it.


Bernard Sietman

"The (Chippewa) river is doing well compared to the other rivers in the Minnesota River system," said Sietman, of what they found. Assisted by volunteers recruited by the Chippewa River Watershed Project, the two spent three days examining and marking with a Global Positioning System over 100 different locations under the river's waters. They were excited to find two species of mussels in the Chippewa River – the spike and black sandshell – that have disappeared from the main stem of the Minnesota River and are listed as species of special concern in the state.

They also found juvenile mussels, evidence that mussels are continuing to reproduce in the river.

Minnesota is home to 49 species of mussels, but 26 of them are now listed as either extirpated, endangered, threatened, or of special concern.

The Minnesota River watershed was once home to 40 of the state's mussel species. Today, only around 20 species can be found, said Davis.

Over-harvest, chemical pollution, sedimentation, dams, channelization, dredging, wetland drainage and practices that cause rapid bounces in river levels are harmful to these aquatic animals. Take dams for example. They prevent fish from migrating. Mussels rely on fish to be hosts and disperse their young. Some mussels use specific species of fish for the task.

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Mussels of the Chippewa River *continued*

Mussels have evolved sophisticated methods for making fish the underwater storks for their young. Female plain pocketbook mussel has a part of flesh that looks like a minnow to attract fish. When a walleye is about to chomp, the mussel's chamber explodes and fills the mouth and gills of the fish with its young. The young take nutrients from the fish's blood and will ride along for a week or more before leaving the fish.

The fish does not seem to be harmed by the experience and may benefit, said Davis. Fish that have hosted mussel young are less vulnerable to other parasites.

"It's nature's vaccination for fish," said Davis. Mussels will move or burrow into the river bottom when water levels drop, but they have virtually no defense against contaminants. Compared to fish, mussels can be more sensitive to chemical contaminants by a full order of magnitude, said Davis. Young mussel larvae are extremely sensitive to ammonia, which washes into rivers from farm fields. "We're discovering that water quality standards designed to protect fish in some waters are not sufficient to protect mussels," said Davis.


Mussels of the Chippewa

Mussels are coming to our attention for their value as gauges of water quality. In the process, we are discovering just how important these animals are to the overall health of our lakes and rivers as well, said Sietman.

We've always considered mussels to be the filters of our waters. They feed on plankton and organic materials. But recent studies are suggesting they also play an important role in the quality of our fisheries as well, said Sietman. He cited one study showing that the biomass in a river's substrata is much greater where live mussels are present. They provide feed for the microscopic organisms on the lower rungs of the food chain, which in turns attract larger predators.

There is also research suggesting that mussels help stabilize a river bottom and reduce scouring. Other research points to the benefits of oxygenation that occur as mussels burrow in a river's substrata. They may play a role akin to that of earthworms in soil said Sietman.

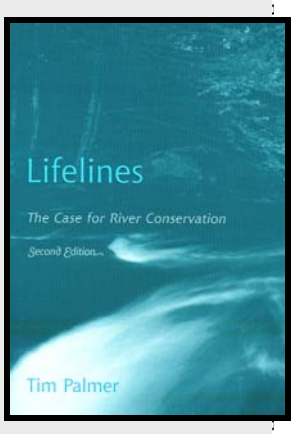
In some very real ways, beds of mussels are to rivers what coral reefs are to our tropical seas, noted Davis. Unlike coral reefs for the colorful fish that inhabit them, mussels have never benefited by widespread public concern or attention. That's starting to change. Davis and Sietman were joined on the Chippewa River by dozens of interested volunteers during an earlier September visit.

The Clean Water Act and improvements to water quality have allowed mussels to make comebacks in some waterways, said Davis. He and Sietman said they are "cautiously optimistic" that we can continue to improve water quality and help mussels rebound. They will continue to survey and monitor mussels and hope to get the public involved in voluntary mussel monitoring programs. Sietman and Davis said they are also hoping to start re-introducing species of mussels to certain waterways.

Book Review: Lifelines – The Case for River Conservation by Tim Palmer

Dripping, trickling, and seeping from large areas rather than pouring from single points of origin, polluted runoff, or "nonpoint pollution," is the vehicle for a whole stew of contaminants now affecting more miles of rivers than all the point discharges put together. Forty-eight percent of all water pollution emanates from agriculture, by far the most voluminous source, draining from cultivated fields, feed lots, and pastures laden with silt, phosphates, pesticides, and nitrate fertilizers.

Tim Palmer has been involved in river protection as a writer, photographer, planner, conservationist, speaker, and consultant since 1970. In this book Tim Palmer examines the alarming condition of rivers in today's world and reports on what people are doing to solve this challenging problem. In many stories, he chronicles the success of citizens and government agencies working for better stewardship and pioneering new ways of caring for our waters and land. Finally, he considers what the future will hold for these critical lifelines.



We allow soil to be eroded into our waterways, in some cases at hundreds of times the natural rates. Erosion rates on cropland in some states reach 64,000 tons per square mile. The lower Minnesota River – the color of chocolate milk straight out of the carton – carries the equivalent of one dump-truck load of sediment every five miles. On the same stream, early explorers had once noted white sand beaches and water so clear that clams could be plucked from the bottom, which is now varnished with shiny brown muck.

Citizen action has always helped to solve water quality problems. In the 1980s, Friends of the Earth and other groups filed thirty-eight lawsuits under the Clean Water Act in New York and New Jersey and won fines four times higher than what federal agencies had settled for in similar cases. Pressure from citizen environmental groups led Congress to reauthorize the Clean Water Act and to override President Reagan's veto by a wide margin in 1987. (President Nixon had also vetoed the original Clean Water Act in 1972 but was overridden by Congress.) Del Wehrspann and Scott Sparlin championed the cause of the Minnesota River in the 1990s, eventually gaining broad community support and a proclamation by the governor that the state's namesake river will be cleaned up.

Michael Groh of Minneapolis died at his home on October 30th from brain cancer. For those who didn't know Michael, he was considered one of the best consultants working in Minnesota. The Minnesota River Watershed Alliance was fortunate enough to have been able to get Michael to serve a facilitator for our quarterly meetings. He knew how to make sure everyone in the room had a voice in the discussion and kept us on task.

I felt Michael was one of a kind and found him fun to work with. Michael had a great quality of being patient with people and knew how to reach out as a mentor and friend. He will be missed by many and I will always think back fondly on our phone conversations and his ability to get straight to the point.

On January 20th (Tuesday evening) the Minnesota River Watershed Alliance will be gathering in Hutchinson to come up with our focus for 2009. A number of potential issues were identified at the October meeting:

- An event focus with nontraditional constituents,
- Produce a TV documentary on the Minnesota River incorporating aerial photography,
- MN River Friendly Label and MN River Paddle Patch/Decal Program
- Cross fertilization between Lake Pepin and MN River groups,
- Backyard drainage awareness program

Art and Barb Straub and Joe Michel talk about their experiences with the Minnesota River.

At the end of October, the Water Resources Center hosted an informal gathering for long-time residents of the Minnesota River Watershed who are featured on the recently developed "MN River Interactive Web Site." People from across the watershed came together at the Riverside Park School House in New Ulm to share stories and learn about other river enthusiasts. We hope to continue gathering stories of people who have a strong connection to the Minnesota River.

Amendment continued from page 1

- 1/3 or 33% goes to wildlife habitat and the outdoors – to be spent to restore, protect and enhance wetlands, prairies, forests and habitat for game, fish and wildlife.
- 19.74% goes to the arts and cultural heritage – to be spent for arts, arts education and arts access and to preserve the state's history and cultural heritage.
- 14.25% goes to parks and trails.
- Funds don't go directly to state agencies. Proposals will be reviewed by citizen advisory groups, who in turn make recommendations to the State Legislature.
- Estimated the average Minnesota household will pay an extra $60 per year in sales tax.
- **The amendment states that the revenue from the sales tax must supplement traditional funding sources and the land acquired using the money collected to be open to public hunting or fishing.**

Amendment continued from page 12

To be sure, there may be some tweaking necessary to realize the biggest gains and benefits from the legacy amendment.

Administering the funds will be no small task. You can bet we all will be scrutinizing the process, especially the citizen oversight committee that will be formed to oversee the $100 million fund that will be fish and game's share of the $300 million raised annually.

But it has worked in Missouri. It will work here.

Even the most vocal critic of the 3/8 of one percent tax increase would admit that it will be barely noticeable individually.

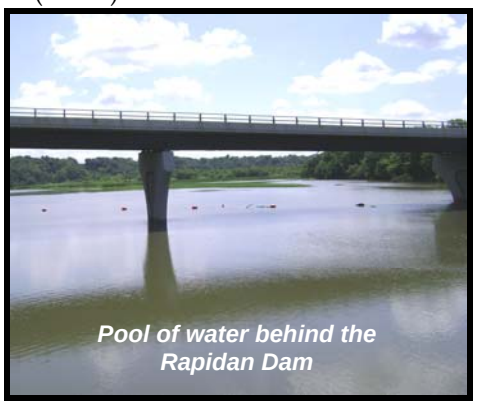
Collectively, it will be a wellspring of badly needed funds to restore the luster to our vaunted Minnesota lifestyle.

Bottom line? All boats – be they those of gas station owners, anglers, hunters, small business owners – will float on the rising tide of our improved natural resources and quality of life. So will those of their children and grandchildren.

We can be darned proud that we stepped up to the plate.

Threat Rating raised on Rapidan Dam

The hazard potential classification of the Rapidan Dam on the Blue Earth River has been raised from "low" to "significant" by the Federal Energy Regulatory Commission (FERC). This classification reflects what would happen if the dam failed, not the current condition of the structure. According to the FERC, all the accumulated farm chemicals – fertilizer, pesticides and herbicides – along with eleven million cubic yards of sediment poses an ecological hazard. If the dam failed, it could cause economic or environmental damage but wouldn't pose a risk to human life.


Pool of water behind the Rapidan Dam

Draining of Olson Lake

To kill off bullheads and fathead minnows (invasive rough fish), the U.S. Fish and Wildlife Service received permission from the Kandiyohi County Commissioners to drain Olson Lake. Located in the southwest portion of the county in Edwards Township, this shallow 140-acre lake will be drawn down to improve overall water quality, waterfowl habitat and increase recreational opportunities.

Water Quality Issues at MN Valley National Wildlife Refuge

Ducks in Long Meadow Lake aren't producing as many broods and officials point to pollutants like road salt and excessive water levels as possible causes. Situated near the Mall of America, this 1,200-acre lake should be an ideal spot for producing waterfowl. U.S. Fish and Wildlife Service staff have been speculating that aquatic insects like midges are being hurt by chemical runoff. This is a prime food source for ducks and other waterfowl. Another issue is the low numbers of waterfowl-friendly plants that provide food and shelter for nesting birds.

Big Stone II Costs Underestimated

The costs to build Big Stone II Coal Plant was underestimated by the utility company partnership, along with overestimating the costs of alternatives energy sources according to a report prepared by Boston Pacific. "In general, we believe the range of emissions, construction and fuel inputs used in the applicants analysis were not appropriate: put another way, they were out of line with current 'best practices' resource selection methodologies," stated the report requested by the Minnesota Public Utilities Commission (MPUC). MPUC is expected to make a decision on the construction of transmission lines to serve the plant into Minnesota in January. According to the utility company partnership, without these transmission lines the plant wouldn't be built.

CURE's New Office Location

Clean Up the River Environment (CURE) location has moved to a new storefront office on main street of Montevideo. The new office is at 117 South 1st Street. Look for the new sign featuring the outline of a canoe. The CURE office is also the Main Street Campus for the Minnesota River School. To help celebrate the new location, CURE is sponsoring "Community Wealth" lunch talks during the month of January.

Wind Power Study

A team at the Gibbon Fairfax Winthrop (GFW) School District has been formed to study the viability of wind power for the district. The team is made up of two administration staff members and one high school science student. Students at GFW are studying wind maps and district electrical use to determine the pay back for wind turbines of various sizes. The school district plans to apply for a Minnesota Schools Cutting Carbon planning grant.

Fort Snelling

Jim Olson of the Twin Cities wrote about the river bottoms at Fort Snelling being one of his favorite places to ride bike. *Whenever I go there I'm amazed at how underused this area is. Normally I come across a few bikers and a couple of walkers or runners. Many days the park is virtually vacant.*


Fort Snelling

The historic significance of this area is well-known. The mighty Mississippi meeting the Minnesota River here. That is why the fort was built. The Native Americans rightfully treasure the sacred Coldwater Spring area. When I go there I ponder what it must have been like to live there long ago.

Minnesota better off with Amendment

By John Cross, Mankato Free Press

Those who voted "no" for the Clean Water, Land and Legacy Amendment might now feel like they were on the losing side of the battle when 56 % of Minnesota voters voted in favor of it.

Nothing could be further from the truth.

As Minnesota enters a new era of conservation, thanks to the estimated $11 billion that will be raised through the sales tax increase over the next 30 years, all Minnesotans eventually will enjoy the benefits. Opponents of the amendment raised a legitimate point that amending the state constitution was not the way to obtain funding for a cause or that dedicated funding removes the legislative give-and-take that ought to be part of any funding process.

And on principal alone, most Minnesotans likely would agree.

The only problem is that for the last 50 years, we've traveled that route and it hasn't worked.

Driven by the vagaries of politics, legislators were content to figuratively fiddle as Rome burned – as our natural resources declined and eroded into a morass of degraded water quality, wildlife and fish habitat. The reality is this: In spite of the major impact that outdoor recreation has on the state's economy and life style, lawmakers annually gave these things that Minnesotans use to measure their quality of life short shrift – a little over just 1 percent of the annual budget.

And many of us were madder than hell and just weren't going to take it any more.

Now, as political dust settles in the wake of the election, we can be pleased as can be (and yes, relieved) that a clear majority of Minnesota voters approved the measure.

From purely a selfish point of view, hopefully, those of us with a few miles on us still have enough hunting and fishing seasons ahead of us to enjoy some of the benefits that undoubtedly will be part of Minnesota's future outdoor heritage thanks to a sure source of dedicated funding.

But the real benefactors will be our children, their children. And in 25 years, they will thank us for our foresight.

Old timers are fond of recalling the good old days when prairie potholes abounded, skies were clouded with ducks, a pheasant dinner was only a short walk away.

The best of such times indeed may yet lie in the future.

Continued on page 10

The mission of the MINNESOTA RIVER WATERSHED ALLIANCE (Watershed Alliance):

The Watershed Alliance is a network of citizens, public agencies and private organizations that communicate the benefits of an ecologically healthy Minnesota River Watershed to others and who actively work towards its improvement and protection.

Questions and comments on the River Talk newsletter can be directed to: Scott Kudelka; Water Resources Center; 184 Trafton Science Center S; Mankato, MN 56001; 507-389-2304 or scott.kudelka@mnsu.edu