



One of the big questions on people's minds recently involves the amount of progress or lack of progress when it comes to water quality in the Minnesota River Basin. As a basin-wide community, have we made

enough improvement in the last two Decades to justify spending over a Billion dollars? If not, where do we go from here?

In a time of overwhelming budget deficits on all government levels, chronic unemployment, and a lack of insight it can be tough to stay positive. We know there is a lot of work to be done but the wild cards involve the political will or the dedication of resources and the continuation of funding to maintain this momentum.

Twenty years ago, Governor Arne Carlson announced the state's intention to make the Minnesota River swimmable and fishable in ten years. Carlson drove home the point by standing on the bank of the Minnesota River in Mankato's Sibley Park holding a jar of dirty water.

The intensity of this discussion returned in early May over the release of a biota study conducted by the Minnesota Pollution Control Agency (MPCA) focusing on fish and macroinvertebrates. MPCA had been directed by the Legislature to reexamine the survey sites originally measured as part of the Minnesota River Assessment Project (MNRP) in the late 1980s. According to the 2011 Report, "While there has only been minimal overall increase in fish . . . scores, an increase in the traditionally large river species was noted. Blue sucker and black buffalo were two species that were not observed during the first sampling (20 years ago) but were captured during the latest sampling."

Fish populations were sampled at 108



precise sites with the study noting an increase in the number of shovelnose sturgeon, smallmouth bass, and walleye. "The return of and increased occurrences of these fish species is an encouraging sign for the Minnesota River since these species typically succeed in waters lacking fine sediments."

Macroinverteb -rate numbers and diversity were another story at the 33 sites

sampled by MPCA. These are aquatic organisms without a backbone that can be seen by the naked eye and a critical part of the food chain. "Large and small river sites had significantly decreased biological condition over the 20 year period," the report stated pointing out a decline of macroinvertebrates in 75 percent of the sites sampled.

TABLE OF CONTENTS:

•	Progress and the Minnesota River	g 1
•	Did You Know	2
•	Hudson Bay Bound	3
•	Chippewa River Dam	4
•	Hawk Creek Tragedy	5
•	River Revival: Working Together to Save the MN River	6
•	Prairie Biomass Coop	7
•	Prairie and Wetland Research Site	8
•	Book Review	9
•	River Ramblings	10
•	What's Happening	11
•	Conservation Thoughts	12

DID YOU KNOW?

The nonprofit organization, Tatanka Bluffs Corridor based out of Redwood Falls, received a twoyear grant of \$100,000 from the Blandin Foundation in April. Funding will be used by this citizen's group to work with organizations like the Center for Changing Landscapes and the Conservation Corps of Minnesota on its regional economic development plan.

One of the Tatanka Bluffs' goals is to weave "the natural and cultural resources assets into an outdoor recreation based economy." These funds will be targeted to enhance the region's economic, conservation and recreational opportunities. Representatives of the Dakota community were invited to provide both guidance and assistance with the grant application.

Some of the projects identified by the Tatanka Bluffs group include building a mountain bike trail in a Renville County Park, putting up interpretive signs at historical sites, building river boat access sites, trail development and construction of an ATV regional park. All projects need to be completed and funding used by March 31, 2013.

Tatanka Bluffs was formed by citizens from Renville and Redwood counties to protect the natural resources of the Minnesota River Corridor between the Upper Sioux Agency State Park and Fort Ridgely State Park and areas surrounding the two counties. They focus on five major areas of interest - outdoors (public recreational land acquisition and trail development); renewable tourism; celebrations, entertainment and gaming; and education and green energy. One of their major projects revolves around building a Minnesota History Learning Center. River Talk is published quarterly in conjunction with the Minnesota River Watershed Alliance (Watershed Alliance) and partners. Thanks to the Water Resources Center for funding this effort.

Watershed Alliance Coordinating Team:

Jesse Anderson, Lower Sioux Indian Community

 jesse.anderson@lowersioux.com 507-697-8642

Susie Carlin, Minnesota River Board

• <u>susan.carlin@mnsu.edu</u> 507-389-6279

Brad Cobb, Green Corridor Project

<u>1231tlc@charter.net</u> 320-493-4695

Dee Czech, MN Earth Sabbath Team

• <u>dczech@frontiernet.net</u> 507-964-5171

James Fett, Maple River CWP Technician

• james_the_walleye@hotmail.com 507-521-3388

Chantill Kahler-Royer, Bolton & Menk

<u>chantillka@bolton-menk.com</u>
507-625-4171

Mike Lein, Carver County

 <u>mlein@co.carver.mn.us</u> 952-361-1802

Tim Lies, Friends of the Minnesota Valley

• <u>timlies@hotmail.com</u> 612-749-3958

Patrick Moore, Clean Up the River Environment

patrick@cureriver.org
320-269-2984

Lori Nelson, Friends of the Minnesota Valley

 Inelson@friendsofmnvalley.org 612-370-9123

Forrest Peterson, MPCA

• <u>forrest.peterson@state.mn.us</u> 320-441-6972

Lee Sundmark, MN DNR

lee.sundmark@dnr.state.mn.us
320-234-2550

Joel Wurscher, High Island Creek & Rush River

joelw@co.sibley.mn.us
507-237-4050

Scott Kudelka, Editor (507-389-2304)

• <u>scott.kudelka@mnsu.edu</u>

Check out the Watershed Alliance's web site: http://watershedalliance.blogspot.com



The Minnesota River Watershed Alliance



In 1930, Eric Sevareid and Walter Port pushed off the dock at Fort Snelling in an 18-foot canvas canoe to paddle up the Minnesota River. Their ultimate goal became reality when they reached the Hudson Bay. These two teenagers having just graduated from high school were in search of adventure and a way to test themselves. Out of this 2,250 mile journey came the now classic book, "Paddling with the Cree" by Eric Sevareid, who went on to became one of the most respected journalists in the world.

Today, the book and their story continue to inspire others to think big and go for their own dreams. A few years ago Sean Bloomfield and Colton Witte took on the challenge to paddle all the way to the Hudson Bay and did it in a record 49 days. They started out in late April with snowflakes floating in the air and high water levels making for a challenging journey up the Minnesota River.

Now Natalie Warren and Ann Raiho hope to be the first females to paddle all 2,250 miles. The two recent graduates of St. Olaf College want to motivate others to embrace the great outdoors, especially young women. Warren and Raiho also see this trip as a way to give back to the YMCA's Camp Menogyn by raising money for a scholarship program that helped them participate in an invitation-only, six hundred mile canoe trip of northern Canada.



Natalie and Ann left from Fort Snelling on June 2nd with their goal of reaching Browns Valley and the end of the Minnesota River Basin in three weeks. For much of the first 335 miles of their adventure the two women battled high water levels, heat and wind but also called the Minnesota River a "hidden gem. We've seen otters and eagles and jumping fish and felt like we were totally in the wilderness at times. I think we've only seen about 10 boats on the 150 miles of the river we've traveled." The two friends expect the trip to cost them \$2,500 mostly to pay for a float plane ride and train tickets to get home once they reach Hudson Bay. Much of their gear including a Langford Prospector Canoe, Sierra Design tent and food (granola, pasta and rice) has been donated by a variety of sponsors. Any funds raised above the cost of the trip will be donated.



Constant high water levels at flood stage proved to be a major challenge for Natalie and Ann paddling up the Minnesota River. "The river is still really flooded. Everyone we've met has commented on the level of the Minnesota compared to where it usually is this time of the year. We've been working really hard to get through the flooded waters. Once we tried to take a shortcut through a lagoon to cut off a bend in the river. We were in there for about 45 minutes and lost every sense of direction! When we found our way back we were only about 10 ft upstream of where we had entered the lagoon."

On their trip up the Minnesota River, Ann and Natalie stopped to visit a number of state parks including Minneopa at Mankato, Flandrau in New Ulm and Upper Sioux Agency. "The Minnesota River from New Ulm to Montevideo is even more beautiful than the first stretch from Fort Snelling to New Ulm (which is gorgeous). We feel like we are in the middle of the wilderness; the ecosystem is thriving and sometimes we go days without seeing other people! Large granite outcroppings and more pine trees have started popping up along the river and spicing things up as far as aesthetics go. It's been really cool to paddle on the Minnesota and learn about the waterways that helped shaped Minnesota's history. See if for yourself if you haven't already."

They paddled into Montevideo in time to be part of the community's Fiesta Days and River Rendezvous down at Lagoon Park. Both of them received a Minnesota River Paddler patch and decal from the Minnesota River Watershed Alliance for paddling all 335 miles. "We went on a canoe race and got to talk to several different people in town while bands played and delicious Uruguian food cooked on



Dams were built on rivers for a variety of reasons ranging from hydro-electric power, flood control, providing a stable water supply and even recreational opportunities. Many of these were socalled lowhead, overflow dams and most have outlived their usefulness. These aging and crumbling structures are now a liability for the owners and anyone who is using the river. In addition to being a "death trap," the dams block fish migration upstream.

Chris Domeier, a fisheries biologist with the Minnesota Department of Natural Resources has been

working over the last few years to remove a number of these dams in the Upper Minnesota River Basin. According to Domeier, they are dangerous because during high flows the water rushing over the dam rolls over again and again trapping whatever happens to get caught inside the churning water. Fifty-eight people in Minnesota drowned at these lowhead dams between 1974 and 2009.

Two local lowhead dams – Appleton and Dawson – were removed creating paddler-friendly rivers and also improving the stream's overall fisheries. Originally built in 1872 for a grist mill operation on the Pomme de Terre River, the Appleton dam had began to fail by the late 1990s. The DNR and City worked together to replace the structure with a Rock Arch Rapids and restore the river upstream at a cost of \$367,000. In Dawson, the DNR put in a series of 15 rock weirs or rapids to replace a dam on the Lac qui Parle River. They built the rapids at the height to maintain the original pool level.

The DNR is now looking to remove the lowhead dam on the Chippewa River at Montevideo. Built in 1958 as part of a highway construction project by the Minnesota Department of Transportation (MDOT), the dam was the site of three people drowning in 1975. MDOT recently discovered they still owned the dam after this state agency built it to handle increased flow capacity after closing one of two channels on the Chippewa River. They tried to turn over ownership to the DNR in 1977 but it never went through. MDOT Engineer, Paul Rasmussen reported the dam should be removed next summer after a number of studies are finished. For the dam on the Chippewa River, the existing concrete abutments will remain in place as a way to prevent any potential damage to the new levee in case the river attempts to revert to its former channel. The plan according to Chris Domeier is to remove part of the concrete's sill and place 4-foot to 6foot boulders over it to create a series of four rock weirs or rapids to hold the streambank in place. The DNR will probably analyze any silt deposited above the dam for content and most likely dig out and remove from the river.

Domeier told a group of people at a Montevideo City Council meeting in May, the new structure will make for a safer river and "will look like



a river, and act like a river." Except during periods of low water, anyone canoeing or kayaking should be able to paddle through the rock weirs. Once the dam is removed, water levels will drop four to five feet with a good possibility of the Lagoon Park's channel going dry.

Funding the project continues to be a major challenge for removing the dam.

The DNR should be able to use \$150,000 from its Dam Safety Program and another \$40,000 available through the Fisheries Division. Domeier also expects the U.S. Fish and Wildlife Service to contribute \$100,000 as part of its fish passage funding. The cost should be much lower than the \$800,000 spent for the Dawson project.

Removal of the dam will also benefit the health of the fisheries in the Chippewa River. By acting a barrier to any natural movement of many fish species, these structures keep them from reaching food sources, spawning areas, along with deeper and cooler water. Dams are the result for the disappearance of lake sturgeon from the Upper Minnesota River Watershed including Big Stone Lake. Other fish impacted by dams like the one at Minnesota Falls below Granite Falls includes shovelnose sturgeon, paddlefish and flathead catfish.

Lagoon Park is a popular spot including during the annual River Rendezvous.



HAMK CREEK TRAGEDY-KAYAKER DROMIS



Tragedy struck the Hawk Creek on June 25th when Diane Bigler-Hagenow died on a paddle with family and friends. The 55-year-old woman from Newhall, Iowa was an experienced kayaker who was wearing a life jacket and a wetsuit.

Bigler-Hagenow and her husband John Hagenow were paddling with their son and two friends late Saturday afternoon when the accident occurred. At around 5:30 p.m. her kayak capsized after appearing to hit a submerged log. A strong current pinned the women against fallen tree limb and other debris, entangling her body among the logs and rushing water.

John Hagenow tried to get his wife free by throwing her a rope. He pulled one of her arms out of the water but the body stayed trapped by a log. "It was a tragic accident and we tried to save her but couldn't, Hagenow told the Minneapolis Star Tribune the next day. "She was the type of lady who liked to live each day to the fullest. I don't care if it was kayaking. I don't care if it was playing with her grandchildren."

One of the group members managed to call for help with emergency services responding at 6:01. Neighboring sheriff and police departments used a rescue boat to recover Bigler-Hagenow's body approximately thirty minutes later from the water.

In a Granite Falls Advocate article, Cory Netland of Hawke Creek Watershed Project stated Bigler-Hagenow held a level three river kayaker certification with the training and equipment to address all emergency situations. "Despite being prepared, the incredible power of the water was too much to overcome," Netland reported. At the time of the tragedy, Hawk Creek was flowing at 1,500 cubic feet per second (cfs). According to Netland, those not certified a whitewater kayaker shouldn't be paddling anything above 500 cfs. A nurse at Mercy Hospital in Iowa City, Diane Bigler-Hagenow came to the area to see her son Brad Bigler, the head basketball coach for Southwest Minnesota State University in Marshall. Diane and her husband John kayaked together eight to 10 times a year and had been married for six years. She is survived by two children and three grandchildren.

A Letter from Patrick Moore of CURE

You may have heard now about Diane Bigler-Hagenow, of Newhall, Iowa drowned in a kayaking accident on Hawk Creek this past Saturday.

At CURE, Diane's tragic death raises many questions as we re-examine our role in the promotion of the recreational use of the rivers in the Upper Minnesota River Watershed.

Many of us shudder as we realize that what happened to Diane, could have happened to us. She was an experienced paddler. It was a freak accident.

In the aftermath of this tragic event, CURE will continue to help, warn and advise the general public about the area rivers and the safe ways to enjoy them.

We will work with local government agencies to design easy access and understand web links to river gauges where paddlers go to assess water levels to determine if it is safe for paddling.

For example, we know that this past Saturday, Hawk Creek was flowing at four to five times the rate than many paddles would consider safe, but it is not easy to know that unless you are a local river rat or a tech minded, internet savvy person with the ability to translate raw hydrograph data into something that makes sense to the average person (i.e. Hawk Creek is relatively safe and fun to paddle when it is flowing between 250 and 450 cubic feet per second).

At CURE, we seek to avoid a reaction to Diane's death that would have parents keeping themselves and their kids off the river and instead staying inside to watch TV and play video games.





By Tim Krohn, Mankato Free Press

Makers of a new documentary on the Minnesota River, which is getting statewide prime-time airing on June 12th, hope it kick-starts renewed interest in the basin.

"It's a fabulous story, beautifully told and we're going to change the conversation about the Minnesota River," said John Hickman, executive producer.

The one-hour documentary, "River Revival: Working Together to Save the Minnesota River," gets

some instant credibility from the film's narrator, Ron Schara, host of the Minnesota Bound television series. Schara quickly agreed to host the project, saying, "Every time I do a talk somewhere I always ask why is it that our namesake river, the Minnesota, is the direst." The film was

produced by the Water Resources Center (WRC)

at Minnesota State University Mankato.

"This is a great way to highlight all the efforts of people and organizations who are out there doing good things," said Scott Kudelka, water assessment specialist at the WRC.

The project comes as reports show there has been slow improvement in water quality in recent years, after major earlier efforts in river restoration.

But Kudelka said bettering what was labeled one of the dirtiest rivers in America is an ongoing process that still has strong support.

"There is a lot of positive energy in the basin. Even though a lot of water quality improvement hasn't been made, we're moving forward instead of backward."

Hickman, a longtime river advocate from Bloomington, helped write a citizens' advisory report on the river for the Legislature in 1994.

"There's a certain level of frustration in that the things in the report have been only partially implemented. We could have made more progress if there had been a more concerted effort."

Still, he said, there has been measurable progress, including lower phosphorous levels, a downward trend in sediment and improved fish populations.

Hickman said the biggest goal moving forward

Professor Bryce Happie being in Elviewed by

is, "Recognition that there are no opposing sides in this effort, that we're all in it together and we all have responsibility for the impaired waters. It can't be agriculture versus urban areas, that's the impediment."

Hickman and longtime documentary-maker Jon Carlson, of EPIC Media, interviewed people working on restoration and recreational programs, including farmers planting sensitive land with perennial crops and groups restoring prairies to native grasses.

The documentary also has an interview with Arne Carlson, who as governor launched the restoration of the basin, and with former Vice President Walter Mondale, who as a senator in 1976 helped

> sponsor legislation to create the Minnesota River Valley National Wildlife Refuge on the south edge of the Twin Cities.

Coinciding with the documentary is a major upgrade to the Water Resources Center's website – <u>www.mnriver.org</u>. The site was created in 2000 as a repository for all scientific data about the Minnesota River.

"Now it will be a portal for the entire basin, showing where people can volunteer, best places to paddle or hike and a lot of things beyond just

water quality," Kudelka said.

The projects got support from the McKnight Foundation, Friends of the Minnesota Valley, Montevideo-based CURE, and the new Ulm-based CCMR and others.

Our View: We're all responsible for a better river

The state's namesake river had been listed as one of the dirtiest in the nation and big challenges remain to improve it. But the documentary showcases that many people who continue to better the river and the growing number of people who appreciate the gem we have running through southern Minnesota.

Finding better ways to manage runoff is one of the big challenges moving forward. John Hickman, says doing that requires something that hasn't really been attained before: Getting farmers, city dwellers and others living around the basin to unify behind water quality improvement, realizing everyone contributes to pollution and everyone has a responsibility to improve water quality.

Groups in the basin have been hosting Friendship Tours in which ag land owners, urbanites and advocates have come together to take an objective look at problems and realistic solutions – and to simply enjoy the river together.

The documentary is an informative, well-done program that shows the energy and successes in the basin. It's clear that residents have in the past decade become more interested in the river and more are enjoying it.



By Janet Kubat Willette, AgriNews

While years from completion, a board of directors in south central Minnesota is laying the groundwork to answer the chicken and egg question that has plagued renewable fuel development beyond the first generation of ethanol.

The answer Prairie Biomass Co-op of Madelia has arrived at is that a cooperative and it's fuel shed need to develop in unison.

There's still a lot of unknowns, but at least we have a vision of where it's all going," said Linda Meschke, spokeswoman for Prairie Skies Cooperative.

Meschke estimates it will take 45,000 acres of perennial grass, corn stover, straw, alfalfa, shortrotation willows and miscanthus to supply a 300-tonper-day facility that will convert agricultural biomass into gasoline, diesel fuel and ammonia.

It will be a three-phase project, Meschke explained. First, the agricultural feedstock will be torrefied. This produces a more uniform product.

Torrefaction is the process used to turn wood chips into charcoal, said Duane Goetsch, president and founder of Gradient Technology and chief technology officer for SYNGAS Technology, a new company formed by Gradient to focus on the biofuels market. The Elk River company is the project engineer for the Madelia biofuels project.

In torrefaction, biomass material is heated at a high temperature in an oxygen-free environment. At Prairie Skies Biomass Coop, corn stover, short-rotation willows and other biomass will be torrefied into biocoal, which can be substituted for coal in coal-burning power plants. It's a green alternative to coal, Goetsch





The second phase is to add gasifier technology. This will turn the torrefied material into synthetic gas, which is primarily hydrogen and carbon monoxide, and also produce electricity. The third phase is to use the syngas to produce gasoline, diesel fuel, and co-product ammonia.

The fuel produced will meet established fuel standards. It will be impossible to tell if it's made from petroleum or biomass, Goetsch said.

The gasoline or diesel fuel could be sold to local farmer cooperatives who now deliver petroleum products to farms and convenience stores. "I'm positive it's going to go forward," Goetsch said. "The rate is the question."

No commercially available high-pressure gasifier exists for biomass, the development of which will be the main mission of SYNGAS Technology, Goetsch said. That's probably five years down the road, but he hopes to have a demonstration unit up and running in three.

It makes financial sense to use biomass to make gasoline and diesel fuel as long as oil stays above \$85 a barrel, he said. "We really do need to get serious about energy," Goetsch said. "The days of cheap energy are over."

The Prairie Skies plan isn't just about making gasoline, it's much further reaching. If Meschke had her way, she'd design a system in which perennials were strategically placed on the landscape to reduce agricultural pollution, improve water quality, sequester carbon and provide wildlife habitat while also producing biomass tonnage. The most productive soils would still be planted to corn and soybeans, she said, but targeted plantings of perennial crops would go a long ways toward minimizing pollution. If farmers are proactive, it will not only be great public relations but also may help eliminate future regulations. If all new acres were planted to biomass, it would account for 3 percent of the region's landscape.

Meschke acknowledges she probably won't get her way, so she's drawing upon what's happening in the region now. There are 30,000 acres of small grain raised in the region, and some of the straw is left unused in the field. This could be marketed to the cooperative. There are 54,000 acres enrolled in conservation programs in the area. If the applicable agency agreed, harvest could be used as a management tool, Meschke said. The harvested biomass could be sold to the cooperative.

The cooperative wants 100,000 tons of biomass annually from a 25 mile to 40 mile radius of Madelia, she said. The region they're targeting includes the counties of Martin, Faribault, Watonwan, Blue Earth, Brown, Nicollet, Jackson and Cottonwood.



Professors, students, researchers and the public are all going to benefit from the donation of 58 acres by the Lime Valley Development Company, Inc. to the Minnesota State University, Mankato (MSUM). This prairie and wetland landscape will be the subject of ongoing environmental research projects and a great opportunity for studying water.

According to MSUM officials, biology students will use the land to research plant habitat; civil engineering students will use it to learn about the environmental impact of development; geology students will use it to learn about and test water resources; and education students will use it to develop new natural science teaching methods.

Five years ago, Brad Cook a MSUM Biology Professor, met with Brad Radichel, president of Lime Valley and his sisters Brenda Radichel Quaye and Christina Radichel Caulkins (Lime Valley directors) to see about donating the land to the University for conducting environmental-related studies. After a lot of hard work and meetings, the site is MSUM's first education and research station.

"This is a tremendous opportunity for the university to further increase its focus on environmental research and teaching," stated Richard

Davenport, President of MSUM. "This gift will allow our students and faculty to conduct research across the curriculum that will improve life for all Minnesotans. We are grateful to Lime Valley Development and the Radichel family for this generous and meaningful gift."

In order to move the donation forward, the University and Lime Valley maneuvered through a complicated process involving state and federal agencies including the MN Department of Natural Resources and U.S. Army Corps of Engineers, along

with the city of Mankato. Numerous legal and environmental issues needed to be completed to get permission from the Corps to conduct research on wetlands they helped restore.

"We are delighted that Lime Valley Development Company can assist Minnesota State Mankato with its environmental research," said Brad Radichel of Lime Valley Development Company. "Environmental concerns reach across so many disciplines. My parents, William and Darlene Radichel, believed that people need to continually renew their connections to the outdoors, and my sisters and I want to help perpetuate that."

The donation of the 58 acres is only one part of a strong history of giving by the Radichel family to the Minnesota State University, Mankato when it comes to environmental research. In 2006, the family provided a generous endowment through the William D. Radichel Foundation, to pay student assistant curators to maintain the Darlene and William Radichel Herbarium – one of the state's largest collections of mounted and labeled native plants.

A dedication of donated land was held on May 24th by MSUM to recognize the importance of this gift by the Lime Valley Development Company and recognize a number of professors who will be involved with research projects at the site. Both University President Davenport and Brad Radichel spoke at the ceremony on the importance of this educational and research station.

MSUM faculty attending the ceremony were Bradley Cook, a biology professor and an expert in wetland ecology and invasive plants; Stephen Druschal, an expert in environmental engineering, hazardous waste remediation and ecological restoration; and Bryce Hoppie, a geology professor and expert in water quality.



Patti Kramlinger (right), development director at MSUM, and Brad Radichel standing on the northern edge of the property (northeast of Hwy 14 and Third Avenue intersection. Photo by Pat Christman, Mankato Free Press

This MSUM educational and research site features a tiered wetland that will provide ideal primal field learning stations in the areas of: water movement management and quality, analysis of wetland construction and ecological function, and synthesis and critical thinking that connect ecological and regulatory application.

Hudson Bay Bound continued from page 3

the grill. We are getting breakfast with Patrick Moore from CURE who is a great advocate for cleaning up our waterways. These people know what's up!

"Our environmental backgrounds have come in handy. We have spent some time talking about the flooding and pollution issues concerning the river and documenting things like crops growing straight up to the river bank, small, or no buffer zones, and cows standing right in the river. Thanks to non-profit and community groups along the river, the Minnesota has improved in the last few years but there is still so much work to be done. We need to realize that healthy communities are directly correlated and that towns along the river have the potential to spark big change in environmental and public health issues in Minnesota and beyond."

After their enjoyable break in Montevideo, the women continued to paddle upstream through the lakes of Lac qui Parle, Marsh and Big Stone to get to the continental divide separating the Minnesota River from the Red River. On this part of the trip Ann and Natalie stayed in a steel grain bin retrofitted into a hunting shack, enjoyed a potluck with members of the Big Stone County Farmer's Market and learned more on the effort to improve water quality and creating a more sustainable life for rural areas.



"When we were in Montevideo and in Clinton we spent a lot of time discussing farming issues about corn production, pollution, and the missing farm generation. Groups like CURE and the Land Stewardship Project are trying to work with communities to make farmers' markets more popular and to get young people into small towns. It was really great to meet people doing these things, but we can't help feel there is a void to be filled. What's going to happen to our food system when all of the farmers are gone and the small towns are empty?"

Warren and Raiho crossed over into the Red River Basin at Browns Valley to start paddling downstream towards Lake Winnipeg. "Downstream has been like floating on a cloud compared to upstream! We think we can average about 45 miles a day and travel at around 5 mph. That's 300% better than upstream on the Minnesota River."

Book Review: "River People" by Kevin Langton

Consider the currents, the flood that jumps the bank last fall and runs itself through our post office and fills our neighbors' basements. Give that current the numbing coldness of snowmelt in the spring when the morel hunting is best done from a boat so you can see the riverbank spread out like a blanket, the mushrooms popping golden in its seams, calling you. But keep an eye to that current, to the fresh log jam that will suck you under and hold you there in its wooden fingers, gripped long past your lungs surrendering. It will not give you back for months, not until your skin is gone and your bones are washed clean, stripped of organs and veins and nerves.

A resident of St. Clair, Kevin Langton shares his fiction, poetry, and nonfiction about river life in his self-published book "River People." This award-winning writer teaches English and writing courses at Rasmussen College in Mankato. Purchase the book at www.AuthorKevinLangton.com



Now consider the fox jumping from rocks on h bank beside you as the rapids on Cobb River, pull, and the geese corralling their goslings with those soft yellow feathers, and the cry of redtailed hawks overhead. Consider the highpitched moan of that cougar John heard, the one who dens the confluence of the Blue Earth and Maple. Consider the stunning silence of those rivers in winter, the muffled swish of your skis and the soft tap of your poles on a Sunday morning, the snowflakes drifting around you.

Rivers are where I hear my Higher Power loudest, calmest, clearest, even in their silences. Rivers remind me that death is always out there and so is life if you're willing to let it find you. Rivers show me the worth of the past and the importance of the now.

Rivers are where I hear my Higher Power loudest, calmest, clearest, even in their silences. Rivers remind me that death is always out there and so is life if you're willing to let it find you. Rivers show me the worth of the past and the importance of the now.

A pair of great horned owls flew from perch to perch ahead of them, finally disappearing into the trees. Deer feeding in a sunken cornfield raised their heads to watch her pass. The dog scattered kingfishers and mourning doves. Margaret followed the fresh path of a pack of coyotes. Eventually she rounded a bend to find herself in the middle of a rafter of wild turkeys taking flight. The beating of their wings stirred her hair and started her heart and though they appeared to be heavy animals a part of her rose weightless with them. She stood awestruck in the middle of it all.



Quiet is the only way I can describe the office over the last two weeks. State Government is mostly shutdown as the Governor and Republican leadership can't seem to come together to pass a budget. As a result, most of the staff from the environmental-related agencies of MPCA, DNR and BWSR are laid-off. Right now we at the WRC continue to work only because the University System signed a special temporary budget.

People can only guess when a state budget will be passed and we start to see the fallout of harsh cuts, especially in the natural resource field. As a community of concerned citizens, we need to continue engaging our legislators to make sure they know the value of a restored and protected Minnesota River. Funding for water quality improvements will remain a target for additional reductions by our politicians.

On a much happier note, the showing of the film documentary - "River Revival: Working Together to Save the Minnesota River" really highlighted the ongoing progress to restore the state's namesake river. John Hickman and Jon Carlson did a fantastic job and we hope to see more from them in the future. Once again, I had the privilege to spend a day hanging out with Art and Barb Straub of Le Sueur. They are by far two of my favorite people and an inspiration for what you can accomplish in the world of conservation. We got to see all the hard work by them and others to make Henderson a must stop for birding in the Minnesota River Basin. You would be tough to find anyone as dedicated as Art and Barb to saving a piece of the natural world for the next generation.



In the middle of June I headed up to the Montevideo area to take in their annual River Rendezvous. I am always impressed by how this community embraces rivers and the natural environment. A small group of us from the New Ulm - Mankato area were warmly welcomed and taken care of by Patrick Moore of CURE, Audrey Arner at Moonstone Farm and many others. We enjoyed a paddle on the Chippewa River, all the action of a free-for-all canoe race, amazing locally-grown food and the companionship of people with the same ideas and beliefs when it comes to enjoying the great outdoors.

Progress and the Minnesota River

continued from page 1

Some like Gene Merriam, president of the Freshwater Society and Representative Jean Wagenius, DFL-Minneapolis are demanding a change in how money has been spent in this ongoing effort. Both of them were interviewed by the Minneapolis Star Tribune along with Shannon Fisher. "We can't spend a billion dollars and have outcomes that are pretty much a wash and say that's good enough," said Wagenius and author of the new report's legislation.

Others more directly involved with the effort to improve water quality in the Minnesota River see it in a different light. "After a century of significant neglect, you are not going to see results as fast as legislators and others would like," said Shannon Fisher, director of the Water Resources Center at Minnesota State University Mankato. "For every year of degradation you are looking at four to 10 years of restoration to recover that one year."

Progress or lack of progress will continue to be on people's minds and this type of civil discourse



needs to be part of discussion. We want the best for this valuable resource and a place to be proud of today and for future generations and their embrace of the Minnesota River and tributaries.



CCMR and the Minnesota River Banquet

On April 30th, a large and boisterous crowd gathered at Loa's in New Ulm to celebrate the Minnesota River. The Coalition for a Clean Minnesota River (CCMR) held the 22nd annual Minnesota River Banquet featuring stories and examples of progress surrounding water quality improvements in the Minnesota River Basin. John Hickman and Jon Carlson of EPIC Media showed selected clips from the upcoming film documentary – "River Revival: Working Together to Save the Minnesota River" to a receptive group. CCMR's own Scott Sparlin gave a brief rundown of the organization's highlights for 2010 including the ongoing effort to promote the new technology of conservation drainage.

Riverfront Park making a Difference

Tim Krohn of the Mankato Free Press recently wrote an article highlighting the benefits of the city's Riverfront Park and what it means to this community.



The park is providing something Mankato hasn't had in recent history – a logical site for festivals, entertainment and gatherings. It's becoming the Town Square.

Aesthetics and created spaces like Riverfront Park matter even more in Mankato, which lacks the attraction of quaint old

buildings and historical identity of a city like Red Wing. And the park brings a bit more of the river to a river town without much of a river view.

EPA takes on role with Sugar Beet Coop

The nation's top pollution regulator, the U.S. Environmental Protection Agency (EPA) is now taking the lead from the Minnesota Pollution Control Agency (MPCA) to make sure the Southern Minnesota Sugar Beet Cooperative follows all air and water quality standards. Over the past 15 years, the Coop has been fined hundreds of thousands of dollars for violating water and air pollution limits including one in March on the handling of sulfur dioxide. MPCA normally enforces the federal pollution laws and now will be assisted by EPA, which has greater penalty authority.

Successful Spring Community Clean-Ups

The nonprofit organization, Friends of the Minnesota Valley, helped organize a widely successful Community Clean-Up program for the spring of 2011. Over 2,800 pounds of phosphorus and nitrogen pollution were removed through the effort of nearly 2,000 volunteers participating in 39 community cleanups. According to Lori Nelson, Executive Director of the Friends, debris like grass clippings, leaves and dirt contain high degrees of phosphorus and nitrogen pollution causing a "greening" of the Minnesota River and other local waters.

Montevideo hosts River Rendezvous

On a beautiful summer day in June, the community of Montevideo hosted river rats and others



for a celebration of rivers. People gathered in Lagoon Park to participate in canoe races, listen to a wide range of music styles, and eat locally grown beef prepared by a Uruguayan chef. The as the focal point for the day

Chippewa River served as the focal point for the day with no one in a hurry to rush off to do something else.

Prairie Biomass Coop continued from page 7

The 100,000 tons of biomass will be torrefied and densified to 75,000 tons of torrefied material, Meschke said. The torrefied material doesn't absorb moisture, which has real storage assets, she said.

It's estimated that the torrefaction facility would cost \$22 million. The cost of the second and third stage are unknown at this point. The proposed location is next to Tony Downs Food in Madelia.

"Yeah, we've got a long way to go, but we're off and running, Meschke said.

The cooperative has been organized for about 18 months, and it needs to figure out what shares will be valued at. Grower, supporter and community shares will be offered, Meschke said. The grower shares would be sold to feedstock suppliers and suppliers will purchase shares according to what type of biomass they will deliver. The cooperative will only allow so many shares of a certain type of material.

A community share is for someone in the community who wants to support the project and a supporter share is for someone from outside the area who wants to support the project. Prairie Skies Biomass Cooperative is also applying for a Biomass Research and Development Initiative grant to help get the project going.

"If we get this all to work like I think we can, this will be good for area farmers, this will be good for society in general, it will be good for the environment," Meschke said. "We want to see them be successful. I think it will be good for everybody," Goetsch said.



Edward O. Wilson

I believe that in the process of locating new avenues of creative thought, we will also arrive at an existential conservatism. It is worth asking repeatedly: Where are our deepest roots? We are, it seems, Old World, catarrhine primates, brilliant emergent animals, defined genetically by our unique origins, blessed by our newfound biological genius, and secure in our homeland if we wish to make it so. What does it all mean? This is what it all means. To the extent that we depend on prosthetic devices to keep our selves and the biosphere alive, we will render everything fragile. To the extent that we banish the rest of life, we will impoverish our own species for all time. And if we should surrender our genetic nature to machine-aided ratiocination, and our ethics and art and our very meaning to a habit of careless discursion in the name of progress, imagining ourselves godlike and absolved from our ancient heritage, we will become nothing. (Consilience The Unity of Knowledge)



Known as the "father of sociobiology," Edward O. Wilson is a biologist, researcher, theorist, naturalist, and author. Wilson has been awarded the Pulitzer Prize for General non-Fiction twice and is a Humanist Laureate of the International Academy of Humanism.

If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago. If insects were to vanish, the environment would collapse into chaos. (Words from the Wise)

Now when you cut a forest, an ancient forest in particular, you are not just removing a lot of big trees and a few birds fluttering around the canopy. You are drastically imperiling a vast array of species within a few square miles of you. The number of these species may go to tens of thousands ... Many of them are still unknown to science, and science has not yet discovered the key role undoubtedly played in the maintenance of that ecosystem, as in the case of fungi, microorganisms, and many of the insects. (On Human Nature)

We need freedom to roam across land owned by no one but protected by all, whose unchanging horizon is the same that bounded the world of our millennial ancestors. (The Creation: An Appeal to Save Life on Earth)

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 <u>scott.kudelka@mnsu.edu</u>