# Prairie River Notes

A publication of Prairie Rivers Network
www.prairierivers.org

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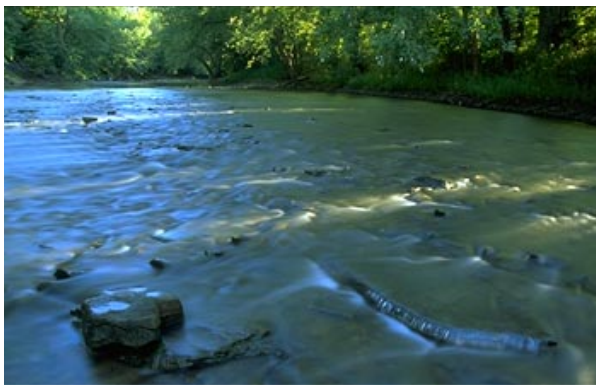
## Saline Branch and Salt Fork River Devastated by Ammonia Release

*Beth Wentzel, Watershed Scientist*

Between July 12th and July 14th the Urbana Champaign Sanitary District's (UCSD) Northeast wastewater treatment plant released a large amount of toxic ammonia that killed more than 80,000 fish on the Saline Branch and the Salt Fork River, affecting altogether at least 20 miles of stream. According to the UCSD, the source of the ammonia was the University of Illinois' Abbott power plant, which reportedly used an ammonia cleaner at its facilities and dumped the waste into the sewer.

While 80,000 dead fish constitute one obvious impact of this incident, there are likely many other problems that are not yet fully understood. Prairie Rivers Network is continuing to seek additional information on the impacts to the river from the discharge. Concerns include the impact on dissolved oxygen levels downstream, the full effect on the river's fish populations, and the impacts on other populations of aquatic life such as crayfish, amphibians and mussels.

*Before and after: One week before the spill, Prairie Rivers member Larry Miller was catching trophy smallmouth bass out of the Salt Fork (left). After the accident these large sportfish and tens of thousands of*



*The Salt Fork River is a natural jewel in eastern central Illinois. Prairie Rivers is now working to see it*

As more information regarding this toxic discharge and its full effects becomes available, Prairie Rivers plans to discuss restoration options with the Sanitary District, the University, and several state and federal agencies. Should a cooperative effort fail to bring about necessary steps to recovery and future protection of the rivers, Prairie Rivers is prepared to take legal action. To that end the organization sent letters to both the Sanitary District and the University notifying them that Prairie Rivers intends to sue under the Clean Water Act if appropriate actions are not taken.

Prior to this incident, the Salt Fork River was an excellent destination for a day on the water, especially popular with anglers and canoeists. We are hopeful that through restoration efforts, this river will regain its status as one of east central Illinois' richest streams.

## Prairie Rivers Gets Tougher Standards on New Power Plant

In March of this year Ameren Energy proposed a new natural gas fired power plant on White Walnut Creek near Pinkneyville, Illinois. Alarmed that a large, new discharge was being proposed on this creek, Prairie Rivers immediately moved to review the water pollution permit and ensure that the plant would not harm the environment.

Among the issues noted in our review of the permit were the failure of Illinois EPA to monitor effluents from the plant for high priority toxic pollutants and heavy metals, and the inadequacy of monitoring for instream impacts. Moreover, Prairie Rivers was concerned by the permit's provision for a "mixing zone," a large area of the stream where violations of water quality standards would be allowed in order to give the river time to dilute wastes.

In technical comments filed with the Illinois EPA we asserted that tougher standards for this permit were required under the Clean Water Act. Specifically, we insisted on improved monitoring conditions, periodic testing for high priority pollutants, and removal of the mixing zone.

Recently Illinois EPA notified Prairie Rivers that these improvements were going to be made to the permit...helping ensure that the new discharge from the plant will not have a detrimental effect on the stream.

## U.S. Court Rules Agriculture is Accountable for Pollution Too

*Marc Miller, Watershed Organizer*

On May 31st of this year the Ninth Circuit Court of Appeals in California affirmed a lower court ruling that the Clean Water Act can address river pollution in waterways affected by only nonpoint source pollution.

The ruling came in response to an appeal brought by several agricultural industry groups who had argued that the Clean Water Act applies only to sewage treatment plants and factories.

> *"We therefore hold that the EPA did not exceed its statutory authority ... even though the river is polluted only by nonpoint sources of pollution."* (p. 7935 of the California Court's decision)
>
> To read the full decision, visit:
> *http://caselaw.lp.findlaw.com/data2/circs/9th/0016026p.pdf*

The main question of the case was whether a water quality restoration plan, called a Total Maximum Daily Load, or TMDL, can be written when agriculture is the only polluter on a river or stream. The Clean Water Act requires the development of water quality restoration plans when rivers, lakes, and streams do not meet water quality goals set by the state pollution control board.

In their opinion, the panel of judges wrote, "We conclude that the EPA's interpretation ... is not only entirely reasonable, but considerably more convincing than the one offered by the plaintiffs in this case."

Clean water advocates in our state are still waiting for Illinois EPA to implement their first restoration plan 30 years after the law's passage. Agriculture is the number one source of water quality impairments, impacting over 4,300 miles of Illinois streams and accounting for over 75 percent of all water quality impairments.

Active participation of all those responsible for the pollution will be necessary to meet clean water standards on those impaired streams.

The court decision affirms the intent of the Clean Water Act and desire of the public to clean up water pollution and protect our rivers.

## They're He-e-e-ere: Aquatic Nuisance Species in Illinois Waters

*Traci Barkley, Prairie Rivers Network Volunteer*

For all of the conspiracy theorists shouting alerts of alien invasions and pointing to the sky, you've got it all wrong. Alien or non-native organisms, specifically those inhabiting aquatic environments, have been invading natural systems outside of their native range for quite some time now, but they aren't approaching from above. They're stowing away in the ballast water of cargo vessels, hitchhiking rides to new territory on recreational boats and trailers, and escaping from bait buckets. Many don't need to travel incognito; they are simply traversing from one formerly separate waterbody to another through manmade canals and water diversions. Most have found human accomplices to aid in their introduction and spread through aquarium and pet releases, intentional stocking for fisheries enhancement, or accidental and intentional releases from aquaculture facilities.

Aquatic nuisance species (ANS), also known as exotics and pests, are wreaking havoc for native species and can contribute to a decline in biodiversity through predation, competition, or by spreading disease and parasites. It has been estimated that 35 to 46 percent of federally threatened and endangered species are listed, in part or entirely, due to the effects of invasive species. Some ANS are also capable of contributing to large-scale ecosystem alterations or harmfully impacting human use of natural systems and their resources. The U.S. Congress reports that approximately $10 million is spent annually on control and research of the sea lamprey alone, and that if left unchecked the lamprey could cost the Great Lakes region over $500 million annually in lost fishing revenues and other indirect economic impacts. With over 160 aquatic nuisance species currently residing in Great Lakes waters and many more poised to enter, the potential economic costs and irrecoverable ecological losses for the region are enormous.

In Illinois, we are in a unique and unsavory predicament, but we have the potential to take some big steps toward halting the spread of ANS. After the retreat of the glaciers at the end of the last Ice Age, the Great Lakes and the Mississippi River drainage basins, two of the largest in North America, became effectively separated. That is until the late 1800s, when, for the sake of public health and water quality, the Chicago Sanitary and Ship Canal (CSSC) was constructed. This canal breached the natural divide between the basins and created a virtual highway for the exchange of aquatic organisms. Today, this canal is an important component of the navigational trade route between the Mississippi River and the Atlantic Ocean, a route that also includes the Great Lakes and the Erie Canal.

It was through this conduit that the zebra mussel was able to spread from the Great Lakes, where it was initially introduced via ballast water, into the entire length of the Mississippi River within only 4 years. The zebra mussel alone cost municipal and industrial water users in the U.S.

*(See Invasive Species, p. 6)*

## Des Plaines River's Recovery to be Reflected in New Standards

*Robert Moore, Executive Director*

Once one of the most polluted waterbodies in the nation, the Des Plaines River has seen its water quality improve drastically in the thirty years since passage of the Clean Water Act. Now Illinois EPA is leading an effort to establish new water quality standards for the river that reflect the improved quality of its waters and ensure that the improvement is maintained in the future.

For decades the Des Plaines River was the dumping ground for every type of polluter imaginable. The two largest dischargers in the area are Midwest Generation (formerly Commonwealth Edison), whose power plants used to discharge tremendous quantities of hot water into the river elevating water temperatures, and the Metropolitan Water Reclamation District (MWRD), which treats and discharges approximately 4 billion gallons of sewage from the City of Chicago into parts of the river every day.

Throughout the last thirty years the MWRD has steadily decreased the amount of harmful pollution it releases by improving its treatment, and Midwest Generation, as the result of a lawsuit brought by environmental groups, has put in equipment to cool the water it releases into the river. These and other improvements in pollution control technology have helped improve water quality and improve the overall condition of the river at the same time.

Fish and other forms of aquatic life have returned to the Des Plaines, and people now are making more recreational use of the river as a result of the improvements. Recently parts of the Des Plaines River were host to the Bass Pro Championship Tournament, practically the Super Bowl of bass fishing.

At present the water quality standards for the Des Plaines are not set high enough to protect the new uses of the river, and they are not high enough to protect the hard won water quality gains of the future...but that will be changing soon.

Illinois EPA, at the encouragement of several groups, including Prairie Rivers, Environmental Law & Policy Center, Sierra Club, Lake Michigan Federation, and Friends of the Chicago River, is leading an effort to study the feasibility of upgrading the water quality standards for the Des Plaines River between the Brandon Road Lock & Dam (just above Joliet) and the I-55 bridge.

Below the I-55 bridge water quality standards are set as "General Use," the highest level of protection offered by the state. Above the bridge the current standards are set for "Secondary Contact," which means water quality is not protected for swimming and other "primary contact" activities but is acceptable for activities like paddling and boating. It also means that several of the chemical water quality standards are weaker.

Illinois EPA and members of the Des Plaines River Use Attainability Analysis Workgroup, which includes municipal, industry, government, and environmental interests, have been reviewing water quality data and other scientific studies for over a year. The studies show that an upgrade of standards is warranted and necessary to meet the goals of the Clean Water Act.

The final study is anticipated late this year. Soon thereafter Illinois EPA will submit a rulemaking proposal to the Illinois Pollution Control Board asking them to upgrade the standards for the Des Plaines.

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## Clean Water Groups Oppose Attempt to Weaken Water Quality Standards

*Albert Ettinger, Enivronmental Law & Policy Center*

Clean water groups including the Environmental Law and Policy Center (ELPC), the Illinois Chapter of the Sierra Club and Prairie Rivers Network, are opposing efforts by Illinois EPA to weaken water quality standards for cyanide and for oxygen consuming wastes.

In hearings held by the Illinois Pollution Control Board in January and March, it was learned that Illinois EPA was proposing rules changes that would allow polluters to legally dump more oxygen consuming wastes into our waters, even though numerous streams are already impaired by low dissolved oxygen levels caused by pollution. Illinois EPA's principal argument for the rule change is that since 1986 it has already been allowing Illinois polluters to discharge oxygen consuming pollutants at the level to be allowed by the proposed rule change.

Illinois EPA is also moving to adopt standards that would allow more cyanide to be dumped into the state's waters. To support this proposal, Illinois EPA relied solely on studies of the effects of cyanide on warmwater fish species, despite studies indicating that freshwater mussels may be more susceptible to pollutants than fish. In addition, Illinois EPA ignored a study indicating that the state fish, the bluegill, may not be able to reproduce in waters containing cyanide at levels the proposal would allow.

As of this writing an initial decision has been released by the Pollution Control Board, and Prairie Rivers and ELPC are reviewing it.

**TAKE ACTION!!**

*Write to the Illinois Pollution Control Board and tell them Illinois' rivers don't need more cyanide in them!*

**Marie Tipsord**
**Attorney, Pollution Control Board**
**100 West Randolph Street, 11-500**
**Chicago, IL 60601**

## Watershed Scientist Joins Prairie Rivers' Staff

**Beth Wentzel** has accepted the newly created full-time position of Watershed Scientist for Prairie Rivers Network. She began work on July 15.

Beth will take charge of Prairie Rivers' policy advocacy - particularly our efforts to fully implement and enforce the Clean Water Act. She will work on water quality issues, and she will train and oversee the volunteers who assist in reviewing and commenting on requests for permits submitted to Illinois EPA. Beth will also press for legislation to benefit rivers and represent Prairie Rivers on workgroups and task forces involving river conservation.

Beth is superbly qualified for the work she will undertake at Prairie Rivers. She grew up in Illinois and earned a BS in Civil Engineering and an MS in Civil and Environmental Engineering, both from the University of Illinois at Urbana-Champaign. Her research for her MS focused on wetland hydrology. For the past three years she has been the Watershed Restoration Specialist at Alabama Rivers Alliance, with responsibilities similar to those she will have at Prairie Rivers. Prior to that, she served for two years in the Peace Corps, teaching math and science to children in Gambia.

Prairie Rivers' Board of Directors and staff are truly delighted that Beth has chosen to join our staff. We look forward to introducing her to our members across the state and working with her to restore and protect our rivers and streams.

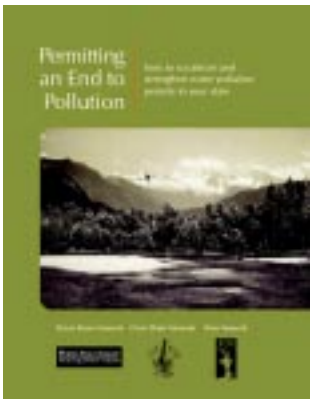
*Beth Wentzel, Prairie Rivers' recently hired Watershed Scientist.*

## New Resources for Protecting Your Watershed

Prairie Rivers Network, Clean Water Network, and River Network have teamedup to create "Permitting an End to Pollution: How to Scrutinize andStrengthen Water Pollution Permits in Your State."

Based heavily on an Illinois-specific guide created by Rob Moore of Prairie Rivers, this national version is intended to help create an army of citizens poised to demand better permits and cleaner water. This indispensable handbook will give concerned citizens all the tools they need to begin analyzing National Pollutant Discharge Elimination System (NPDES) permits in their own states. The guide systematically walks readers through finding out about proposed or existing local NPDES permits, reviewing their contents, developing comments with reference to the Clean Water Act, and submitting them to the water control agency concerned.

To order this publication, send a check for $10.00 plus $2.50 shipping and handling to Prairie Rivers Network at (217) 344-2371, or obtain it online at *www.rivernetwork.org* or *www.cwn.org*.




*A new handbook developed by Prairie Rivers Network will help people get involved with reviewing water pollution permits in their watershed.*

## Scott Russell Sanders to Speak at Prairie Rivers' Annual Dinner

Award-winning Indiana writer **Scott Russell Sanders** will be the keynote speaker at Prairie Rivers' annual banquet, to be held Friday, November 15, 2002, in Champaign.

In Writing from the Center, Staying Put, Hunting for Hope, and other works, Sanders speaks lyrically about the Midwest's landscapes and the ways that people might dwell in them. Two of his essays appeared last year in The New Agrarianism, a collection edited by Prairie Rivers Network's board president, Eric Freyfogle.

Prairie Rivers is exceedingly pleased that Sanders will join us for the evening. We invite all our members and friends to mark their calendars now and plan to attend the banquet not only to hear Sanders speak but also to celebrate the successes Prairie Rivers has won for Illinois rivers over the past year and to look forward to the work that lies ahead.

## Prairie Rivers Network

*...strives to protect the rivers and streams of Illinois and to promote the lasting health and beauty of watershed communities. By providing information, sound science, and hands-on assistance, Prairie Rivers helps individuals and community groups become effective river conservation leaders.*



## News from the Board of Directors

At its May 18, 2002 meeting, the Board of Directors of Prairie Rivers Network elected the following officers: **Eric Freyfogle** of Champaign, President; **Michael Rosenthal** of Glencoe, Secretary; and **Jon McNussen** of Villa Grove, Treasurer. The officers assumed their positions immediately following the election and will serve for one year.

*Eric Freyfogle, Prairie Rivers' new*

The board expressed its gratitude to Bruce Hannon, outgoing president, for his long and effective leadership of the organization and his tireless work on behalf of Illinois environmental initiatives. Bruce remains a member of the board, contributing both his professional expertise and the experience gained from his more than three decades of work on environmental issues.

By a unanimous vote, board members also elected Mercy Davison to a three-year term on the board. Mercy is a graduate of Washington University College of Law and a member of the Illinois bar. She is employed by the City of Normal doing land-use related work.

Prairie Rivers' board and staff are very pleased that Mercy has agreed to serve on the Board of Directors and look forward to having her assistance and expertise as we continue our work to restore and protect Illinois' rivers.

## Illinois DNR Still in the Dam Building Business

At a time when most states are tearing down old dams to restore streams, the Illinois Department of Natural Resources (DNR) has plans to build a new one—and destroy aquatic habitats in the process.

Recently Prairie Rivers Network received notification of DNR's plans to build a dam on a tributary to the Little Vermilion River. The dam would create a five-acre impoundment for fishing in the middle of the recently created Babe Woodyard State Natural Area.

This is a project full of ironies. At a time when the state budget is incredibly tight, it's hard to believe that we have the excess dollars for such work. It's strange that we're going to build a fake lake in the middle of a state natural area. In addition, it seems almost ludicrous to build an impoundment for fishing right next to one of the state's premier streams for fishing.

Moreover, the Little Vermilion River and its tributaries provide habitat for four state protected species—two fish, the river chub and bigeye shiner, and two mussels, the little spectaclecase and slippershell. These are species that the DNR is charged with protecting.

Projects like this raise serious questions about the leadership at Illinois DNR and makes one wonder what motivates Director Manning and what the department's conservation goals are.

## Support Staff Changes

**Justin Glessner** joined Prairie Rivers' staff as a Support Staffperson. He manages our membership database, prepares mailings, and takes care of other office tasks. Originally from Pennsylvania and a graduate of Washington University in St. Louis with a BS in biology, Justin will begin graduate school at the University of Illinois at Urbana-Champaign in the fall semester, preparing for a career in an environmental field.

**Rob Kanter** began volunteering for Prairie Rivers in June, editing the copy for this issue of Prairie River Notes. Rob is also primary caregiver for his children and an instructor and part-time administrator in the English Department at the University of Illinois at Urbana-Champaign.

**Lisa Fitzgerald**, a member of our staff for nearly two years and a volunteer before that, has left Prairie Rivers to study in Costa Rica over the summer. She managed our membership database, handled mailings, workedon our website, and did dozens of other tasks. Lisa will return to the University of Illinois in the fall, continuing graduate work in Urban and Regional Planning. We hope she will find time to work again for Prairie Rivers.

*Invasive Species, continued from p. 2*
over $2 billion during the 1980s and 1990s, money spent keeping water intakes from being clogged by these nonnative mussels.

It is also through the CSSC that a number of other ANS may soon move from the Mississippi River basin to the Great Lakes basin or vice versa. Currently, the round goby, also introduced via ballast water, is using the canal to move towards the Mississippi River. This small, bottom-dwelling fish competes with natives such as sculpins, and is known to consume the eggs of native species, including sport fishes such as the smallmouth bass. Two fish species quickly making their way in the opposite direction are the bighead and silver carps. Both are now abundant in the Mississippi and Illinois rivers, thanks to aquaculture facilities in the state of Arkansas. These planktivores are likely to compete with native and established sport fishes for limited plankton resources in Lake Michigan.

Besides the species noted in conjunction with the CSSC, Illinois waters are already home to a variety of other aquatic nuisance species. Most notable among these are the grass carp, rusty crayfish, spiny water flea, Eurasian milfoil and purple loosestrife.

It has been said, in the case of threatened and endangered species, "extinction is forever." In terms of non-native or invasive species, "introduction is forever." Preventing the introduction of ANS requires a careful and comprehensive approach, as does controlling their spread and mitigating their impacts once they are established. In northeastern Illinois, an experimental electric dispersal barrier has been constructed in the Chicago Sanitary and Ship Canal, with hopes of halting the spread of harmful invasive fishes across the drainage boundary. It was activated in April 2002 and is currently under evaluation for its effectiveness. If this barrier technology proves successful, it could be used to retard or prevent invasions of unwanted fishes wherever there are significant interbasin connections.

Additionally, research on the life history, distribution and potential impacts of prospective invaders and those already introduced is ongoing. Several education campaigns are underway, aiming to inform the public, recreational anglers and boaters, bait shops and those working in the aquarium and aquaculture trades of responsible practices to reduce introduction and spread. Boat, trailer and anchor cleaning stations are popping up near popular boating areas to help users reduce the likelihood of transferring clinging zebra mussels or invasive plants to other waterbodies. New ballast water treatment technologies are being designed and tested with hopes of closing the ballast water pathway. Revised and new legislation is being drafted, covering such issues as planned introductions, ballast water treatment, ANS dispersal barriers, recreational activities, and rapid response plans.

As we continue to expand and grow into one global community, so will the impacts of invasive species. Meeting this challenge will require cooperation and responsibility on behalf of all. From taxpayers to boaters and anglers, aquarium enthusiasts to aquaculturists, invasive species have become everybody's problem.

*Next issue: Highlight on invasive Asian Carps.*

## Spotlight on the Kankakee: Corps River Restoration Shifts Focus

*Marc Miller, Watershed Organizer*

Prairie Rivers Network was pleased to learn this spring that the U.S. Army Corps of Engineers would not pursue a project to create a sediment trap and permanent dredge on the Kankakee River at the Indiana state line.

The decision by the Corps was based on its own study, which found that less than 4 percent of incoming sediment would have been removed by the project. To its credit, the Corps concluded that the money required for this project would not have been justified by the negligible gain of sediment removal. For now the Corps is shifting its efforts from removing sediment to maintaining in-stream habitats for aquatic life.

Prairie Rivers first raised technical questions about the proposed sediment trap and permanent dredge three years ago, in particular focusing on the quantifiable amount of material that would have been removed by the project. At the time Prairie Rivers took the position that the state line project was inappropriately limited in scope, given the magnitude of the problems facing the Kankakee. These problems include channelization along the entire length of the river in Indiana, and sedimentation that results from poor land use practices.

Restoration projects are important for the Kankakee, which remains a rich biological resource despite its problems. Currently the river supports healthy populations of smallmouth bass and other sportfish, as well as several species of threatened and endangered fish, plants, and mussels.

The staff at Prairie Rivers Network also contacted Illinois legislators to support the Grand Kankakee Marsh Fish and Wildlife Refuge, which is a key point to addressing some of these problems. Senator Dick Durbin and Congressman Tim Johnson support this measure. Because of Indiana opposition to the refuge, the U.S. Fish and Wildlife Service has moved the project to Illinois.

Prairie Rivers Network will continue to monitor and comment on restoration activities on the Kankakee.

## Grants Help Fund Prairie Rivers' Initiatives

Prairie Rivers has received several new grants that will help fund specific projects in the coming months.

**Gaylord and Dorothy Donnelley Foundation:** $10,000 to secure fuller implementation and stricter enforcement of the Clean Water Act in the Chicago area as a means of curbing sprawl and protecting local waterways. Payment of the funds is contingent on Prairie Rivers raising $20,000 in matching funds before November, 2002.

**Field Foundation of Illinois, Inc.:** $5,000 to help meet the Donnelley Foundation challenge grant.

**River Network:** $4,075 to help Prairie Rivers meet costs involved in the search for and orientation of a new Executive Director.

Prairie Rivers is grateful for this timely and generous support. Grants such as these, along with membership dues and donations from individuals and corporate supporters, enable us to continue our work.

## New River Conservation Group: Friends of Kickapoo Creek

A group of dedicated landowners has come together to promote stewardship of Kickapoo Creek in McClean County. Ken and Jan Holder of Heyworth decided to form the watershed-based conservation group, Friends of Kickapoo Creek, after their introduction to Prairie Rivers at a slide presentation. With the help of our Watershed Organizer, Marc Miller, the Holders conducted the Friends' first meeting for friends and neighbors at their home on May 14th.

Located in the Sangamon River Watershed, Kickapoo Creek is considered a significant biological resource, or "Class B" stream, by the Illinois Department of Natural Resources. Its waters are home to the creek heelsplitter mussel, a mussel that has been removed from the state threatened list in recent years. Kickapoo Creek has been described as a moderately clear, natural stream with a sand, gravel and cobble bottom. Some of the group's stated goals are to ensure a clean, healthy stream for future generations through stewardship and education.

The group's initial goals will be to recruit members locally and to encourage sound conservation practices in the Kickapoo watershed. For more information about the Friends please contact our Watershed Organizer, Marc Miller, at (217) 344-2371 or *mmiller@prairierivers.org*.

**Don't forget to check out Prairie Rivers Network at www.prairierivers.org**

## Help Protect Illinois' rivers and streams

Join Prairie Rivers Network - the only statewide organization in Illinois working solely on river issues. Your donation will help fund our efforts to bring science and technical information to bear on issues affecting all our state's flowing waters. Your name on our membership roster will add strength to our campaign to preserve and protect Illinois rivers and stream.

Already a member? Please hand this membership application to friends, neighbors, or colleagues - for the sake of our rivers today and in years to come.

Membership Levels:

___ $15.00 Student Membership
___ $25.00 Basic Membership
___ $50.00 Friends' Membership
___ $100.00 River Steward

Send gift membership to:

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