#### A PUBLICATION OF PRAIRIE RIVERS NETWORK



Protecting Illinois' Rivers for People, Fish, and Wildlife

## LET NATURE PROTECT US BY KIM KNOWLES

Floodplains are the low-lying areas adjacent to rivers that flood during storms. They are naturally formed by sediment deposited by rivers and are a necessary part of a healthy functioning river system. Floodplains provide so many benefits for people and for wildlife. In these times of rising sea levels, more intense rain storms, and devastating floods, floodplains can help protect and nourish us.

These are some of the most important things floodplains do for us:

## FLOOD PROTECTION

When floodplains are connected to their rivers, floodplains can provide flood protection by holding water that has overflown a river's banks during storms. Floodplains can hold great quantities of water, preventing floods from damaging nearby communities.

#### WILDLIFE HABITAT

Healthy floodplains provide lifegiving food and habitat for a diverse array of fish, plants, and countless other wild species. It is in floodplains that migratory birds rest and feed, wildlife seeks refuge from predators, and fish spawn and rear their young.

#### CLEAN WATER

Rivers carry harmful pollutants, particularly after storms. Floodplains

provide space for flood waters to spread and slow, thereby allowing pollutant laden water to filter through the soil. This keeps river water cleaner for fish and wildlife, for drinking water, and for recreation.

#### REPLENISHING GROUNDWATER

Groundwater is the water found underground in the spaces between soil and rock. It is stored in geologic formations called aquifers. We depend on groundwater for much of our drinking water and for irrigation. Floodplains allow flood waters to percolate through the soil and replenish aquifers.

#### FERTILE SOILS

Thanks to rivers, floodplains contain rich, fertile soils making them productive areas for growing crops. Sustainable agriculture practices, such as the production of flood tolerant biofuel crops, can be highly compatible with healthy floodplains.

Unfortunately, we are missing out on many of these benefits because we have blocked so many of our rivers from their floodplains, largely by building levees. A levee is typically an earthen wall built along a river to keep high flows within

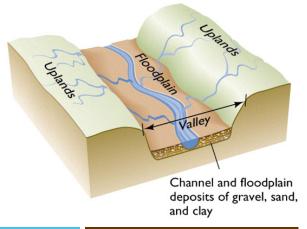
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the river and away from the land and buildings behind the levee. The levee severs the connection between river and floodplain. The Mississippi River alone has thousands of miles of levees. Once a river becomes disconnected from its floodplain, most of the benefits above cannot be realized, because healthy floodplains depend on river flooding to sustain them. In addition, levees can and often do fail, and when they do, lives, homes, and businesses suffer.

Fortunately, more people are recognizing the importance of healthy, connected floodplains.

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## CAROL'S CURRENTS OUR DAUGHTERS' GENERATION

In May, I was very proud to attend my daughter's college graduation. As I contemplate her future, I have been thinking a lot lately about the wellbeing of the Midwestern cities she might call home. If she looks to an Illinois town for a job, will she find a place where residents value the beauty and importance of natural places and strive to protect, expand, and restore them? Will she have to reject communities where her choices are a future with clean water or jobs, clean air or funding the local school system, protecting the places that wildlife need to thrive or economic development? Will she find community leaders that value the input and innovative foresight of young people and the transformational ideas they offer in a changing world?

Projections show small Midwestern cities losing population as young people seek their fortunes in metros like Chicago and St. Louis. But that does not mean that shrinking towns must shrivel and miss out on the innovations of millennial social entrepreneurship. Millennials like my daughter are looking for places that care as much about protecting the natural environment as they do about attracting economic opportunity. Entrepreneurial millennials expect to establish and grow their own innovative enterprises, but they want to do so in a way that provides a social benefit-growing food for their communities while protecting wildlife and water quality, creating jobs by expanding energy systems that power the future without emitting climateimpacting greenhouse gasses. They want a future that is safe, secure, and does not sacrifice nature.

Last month, I visited the Fort Berthold Indian Reservation in western North Dakota, site of intensive oil and natural gas extraction. I saw firsthand the devastating effects that fracking has on the community and the environment. People spoke about the dramatic decline in wildlife and their suffering from the health effects of methane flares that poison the air and brine spills that pollute local waterways. Radioactive soil cores from bore holes are used for road resurfacing to keep up with the near constant trucks that haul away the oil, gas, and chemicalladen waste to unseen sites. Healing land and water from these impacts will take generations.

Illinois bears its own scars from generations of coal mining and coal power. Surface and ground water across our state are polluted by coal mine slurry, and coal ash leaches its toxins into groundwater at many power plant sites-the legacy of powering the last century's robust economic expansion. We cannot let the energy industries of the last century leave us with the costs of clean up while they protect their bottom line, and we cannot fall into the trap of believing that fracking and burning more fossil fuel is a bridge to the clean energy future we must have. Climate scientists tell us that time is running out to prevent the worst effects of climate change. We owe our daughters' generation a world in which they not only survive but thrive, communities where well-being of people and wildlife are priorities, and places that are worth protecting for the generations yet to come. //



## prairieriversnetwork

Prairie Rivers Network champions clean, healthy rivers and lakes and safe drinking water to benefit the people and wildlife of Illinois.

Drawing upon sound science and working cooperatively with others, we advocate public policies and cultural values that sustain the ecological health and biological diversity of water resources and aquatic ecosystems.

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## IF YOU SEE SOMETHING, SAY SOMETHING: TREE MONITORING

#### BY KIM ERNDT-PITCHER

We always benefit from keeping our eyes open to the world around us: it informs us, grounds us, keeps us in tune with the cycles and rhythms of our home. But recently, with the increased use of chemical weed control—particularly a class of herbicides known as Plant Growth Regulators (PGR) that often drift to adjacent lands and non-target plants—it is absolutely critical that we pay attention to what is happening on our lands. By looking at the trees and plants around you as you take your hike, drive home, or walk your property, you can be informed and help monitor the health of our lands and communities.

Just as we are observing more incidents of herbicide injuries to specialty and non-resistant crops, we are also seeing many more injuries to Illinois' native trees. In this age of deregulation and decreased funding for monitoring programs, we are increasingly relying on citizens to fill the void. So it is vitally important that you report and/ or document suspected herbicide injury to crops or plants. All landowners should report plant injury to the Illinois Department of Agriculture (IDOA). Damage seen to native plants and trees on state and federal property should be reported to the area land manager. The Illinois Department of Natural Resources (IDNR) has a monitoring program for their staff where potential herbicide damage can be monitored and reported. These reports will then be shared with IDOA.

Filing a complaint with IDOA or notifying IDNR may not always be appropriate, or perhaps you want to gather additional information about damage to your property. To this end, together with valued members and partners, we have created a monitoring program that will help enhance the herbicide monitoring and complaint processes already in place: prairierivers.org/monitoring-tree-and-planthealth. The more we know about what is happening on the landscape at large, the better equipped we will be to ensure that our children, and their children, have healthy communities, clean water, and lands rich in biodiversity to safeguard themselves. To help support this critical effort, please visit: prairierivers.org/trees. //



A black oak tree shows signs indicative of exposure to herbicide.



A post oak tree shows apical deformation in its leaves caused by suspected herbicide exposure.

## WHY WE SUPPORT PRN: BRUCE HANNON FRIENDS SUSTAINED GIVING RUTH WENE AND TOM SEALS



We have long believed in the vital mission and outstanding performance of Prairie Rivers Network. We had been contributors over the years and then committed to a monthly gift, knowing that sustained giving enables PRN to plan ahead and better respond to emergencies. A manageable increase to that monthly amount made us eligible to become part of the Bruce Hannon Friends of Illinois Rivers. We are delighted to become a friend in this new way to Bruce Hannon, who has been such a loyal friend to the environment. //

## **GET READY TO PARTY ON OCTOBER 26TH**

#### TWO BROTHERS FROM CINCY TAKE TO THE PODIUM TO TALK NATURE

It's almost time for the environmental networking event of the year. That's right, PRN's Annual Fundraising Dinner is fast approaching. Dust off your dress shoes and get ready to laugh with old friends and meet some new fellow river lovers.

We hope you'll join us at this year's Annual Dinner to hear how two guys from suburban Cincinnati connected with creatures! Senior Wildlife Biologist at the National Wildlife Federation John Kanter will be joined on stage by his brother, PRN board member, and Environmental Almanac writer Rob Kanter, to talk about nature. With topics ranging from black

rat snakes and eastern box turtles to Karner blue butterflies and piping plovers, the two will show how connecting with wildlife inspires efforts to promote a world in which people live, in Aldo Leopold's phrasing, as plain members and citizens of the land community.

At NWF, John Kanter fosters the expansion of multi-state wildlife conservation efforts. He'll also give his personal perspective on the work he does to ensure wildlife thrive in a changing world.

But mostly, he says, he would like to encourage PRN about the development of his own lifelong love of animals. //



PRN board member Rob Kanter poses with his brother members in their affection for wildlife through fun stories and Annual Dinner speaker, John Kanter, on a recent trip to Ohio.



## **NOMINATE A RIVER CHAMPION!**

Nominate River Champions for Prairie Rivers Network's River Steward Award! This annual award honors a volunteer who goes above and beyond to protect the water, land, and wildlife of Illinois. Nominations are due by September 28, 2018. Please send the nominee's contact information, your contact information, and a summary of the nominee's river conservation efforts to Sarah Scott at sscott@prairierivers.org.

## **BECOME A SUSTAINING MEMBER OF PRAIRIE RIVERS NETWORK!**

## Debit Authorization Form

hereby authorize Prairie Rivers Network to initiate entries I (we) \_\_\_\_ to my checking/savings accounts at the financial institution listed below, and, if necessary, initiate adjustments for any transactions credited/debited in error. This authority will remain in effect until Prairie Rivers Network is notified by me (us) in writing, email, or by phone call to cancel at any time.

Account Number:

Name of Financial Institution:

Routing Number:

Type of Account: \_\_\_\_\_Checking \_\_\_\_\_Savings

Monthly Donation Amount: \_\_\_\_\_ (Transaction is processed at the end of each month)

Thank you for your support!

## BRINGING ATTENTION TO ELEVATED NITRATE LEVELS IN OUR DRINKING WATER

### BY CATIE GREGG

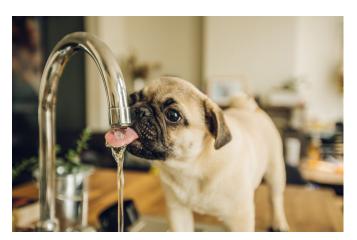
This year, PRN has been looking to increase support for the Nutrient Loss Reduction Strategy (NLRS) by stabilizing Soil and Water Conservation District (SWCD) funding, maximizing federal funding, and meeting with local community leaders to talk about the impact nitrates have on local water quality. The majority of the nitrates in our water comes from our cropland, and the NLRS aims to increase the use of conservation farming practices to reduce the amount of nitrate and phosphate leaching from our soil. This effort will not only protect the Gulf of Mexico but also reduce the nitrate in Illinois' drinking water.

We started looking at Illinois' nutrient pollution problem from a new angle last year. We asked, if our water is so high in nitrates that it causes the Gulf Dead Zone hundreds of miles downstream from us, what does it do to our local water quality? We found that quite a few Illinois communities, of all sizes, have had to purchase or are in the process of purchasing nitrate treatment facilities because their water has reached the federal maximum contaminant level (MCL) for safe drinking water. These facilities are expensive, fail to protect people who use private wells, and do not treat the source of the problem.

While there is the MCL standard set to 10 mg/L nitrate-N, we found research indicating higher rates of certain cancers and birth defects in populations that chronically drink water with elevated nitrate levels at much lower concentrations. Even Blue Baby Syndrome symptoms, the original reason for the nitrate drinking standard, are being seen at these



Carol in Springfield to advocate for the NLRS resolution and funding for SWCDs.



lower levels. At the same time, we noted communities with elevated nitrate levels in their water, but below the MCL standard, for further study. We found that since 2010, 16 communities have had their water exceed the MCL, and 67 communities are being chronically exposed to elevated levels of nitrate below the MCL.

After compiling our findings, we released a report titled, *Illinois' Ignored Water Crisis*, to increase awareness of nitrate water issues in Illinois. It examines the health implications and costs associated with the rising level of nitrates in Illinois drinking water. We shared this report with our partners, legislators, and local community leaders. Local and national media outlets picked up the story helping us spread this information even farther. You may have heard me or Carol talking about the issue on your local Illinois public radio station.

During this time, we also met with several community leaders to talk about the issue. Many towns we visited were in central Illinois, including Taylorville, Decatur, and Moweaqua. We also spoke with the water superintendents of Assumption and Blue Mound. All of these towns' waters have exceeded the MCL and all have had to deal with the cost of purchasing a nitrate treatment facility. The goal of these meetings was to encourage local leaders to think about how they might work with farmers to reduce nutrient pollution before it gets to their tap, rather than just approaching it from an engineering perspective.

### OUTREACH EFFORTS

In collaboration with our partners the Illinois Stewardship

## THE FUTURE OF RENEWABLE ENERGY

#### BY AMANDA PANKAU

Increasing temperatures and weather events associated with climate change will continue to have a significant impact on our water resources, with the potential for devastating effects. Scientists have warned that we have little time to take action to slow the pace and limit the impacts of climate change. We must expand the use of clean, renewable energy and transform our energy and transportation systems to minimize external inputs, pollution, and harm.

As we work to clean up the legacy waste of the past, PRN continues to look towards future energy policy. The fate of Illinois' 83 coal ash impoundments at 24 power plants across the state has yet to be decided. While we continue the fight for the Middle Fork, monitor groundwater data, engage coal ash communities, and pursue policies that ensure adequate clean-up, we have also set our sights on ensuring Illinois has a future without coal ash production.

Illinois' clean energy opportunities are thanks in large part to the Future Energy Jobs Act (FEJA). In 2007 Illinois developed a Renewable Portfolio Standard (RPS) that set a goal for Illinois to obtain 25% of our energy from renewable sources by 2025. Despite the RPS goal, issues with funding ended up incentivizing wind production outside of Illinois and caused major wind and solar projects in Illinois to come to a standstill. That all changed in late 2016 when Illinois passed FEJA, a bipartisan clean energy and jobbuilding piece of legislation that streamlines funding and creates programs and incentives that stand to surpass that original goal.

FEJA sets Illinois on the path toward meeting the RPS by requiring greater energy efficiency, increasing access to renewable energy through community and low-income solar projects, and creating workforce development programs statewide. The PRN blog has covered several FEJA related topics over the past year including: *Five Exciting Solar Projects That Made Headlines* in 2017 and *Community Solar*. Community Solar is a new FEJA program that allows community members who may not have an opportunity for a solar project on their property, such as renters and those with shaded roofs or limited incomes, to come together as subscribers in an off-site Community Solar project. The administrative rules to implement this program are expected later this year. The success of FEJA's passage was due to the work of the Illinois State Climate Action Table (Climate Table) in collaboration with the Illinois Clean Jobs Coalition. The Climate Table is made up of state organizations working together to further clean energy policies and opportunities to improve public health, protect the environment, and create a clean energy economy. PRN joined the Climate Table in 2017 and founded the Downstate Caucus of the Table last year to better engage downstate organizations and communities in accelerating climate action.

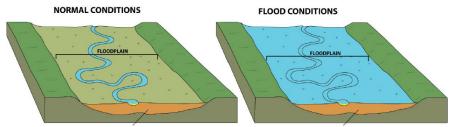
Last summer, PRN and EcoJustice Collaborative cohosted several FEJA Forums across downstate Illinois to spread the word about new programs and incentives. PRN is currently co-sponsoring the Solar U-C 3.0 groupbuy program in cooperation with the Midwest Renewable Energy Association and the City of Urbana. The program makes solar more accessible and affordable, and it provides community outreach and education about renewable energy. More than 20 "Solar Power Hour" educational events are ongoing this summer in Champaign and Piatt Counties. Solar group-buys are also being offered in McLean County and the Metro-East area.

PRN and our Downstate Caucus partners will soon be hosting community conservations in downstate Illinois communities—inviting citizens, leaders and politicians to join the conversation about their vision for a clean energy future that builds both economic opportunity and community wellbeing. These visioning session conversations will inform the next policies that will empower Illinois to build a clean, equitable energy future. //



In 2016, mammoth bumble bees and ginormous monarch butterflies were sighted swarming solar panels in Illinois rejoicing the bipartisan Future Energy Jobs Act.

## NATURE continued from page 1



There is a growing movement for using "nature-based" solutions to address societal problems like flooding, water pollution, and dwindling water supplies. Nature-based solutions rely on natural processes like restoring river floodplain connectivity so that floodplains can

absorb flood waters, filter pollution, and replenish ground water as nature intended. These solutions are more costeffective than fighting floods and building walls, and they bring the beauty of nature back to cities and other landscapes.

Prairie Rivers Network is a proud supporter of nature-based solutions and is working to restore river-floodplain connectivity. We oppose policies and actions that divide rivers from floodplains and support that which reunites them. We believe the solution is to work with nature, rather than against it, allowing nature to sustain and protect us all. //

## NITRATES continued from page 5

Alliance, Illinois Environmental Council, and Sierra Club, we proposed a resolution to the General Assembly asking legislators to voice their support for the Illinois NLRS. Many of them are just now learning about the water quality challenges of removing nitrates from our drinking water. There is growing bipartisan support for the resolution in the House and Senate. Be sure to ask your legislators to support the NLRS.

This year the SWCDs received their full funding request. This is a slight increase from last year but still below their previous levels. The Governor has acknowledged the SWCDs benefit to the public. We are excited to see the SWCDs take a leading role in advancing farmer and landowner adoption of critical practices for soil health and water quality.

The budget also included funding for the Conservation Reserve Enhancement Program (CREP) for the first time since 2015. These funds allow Illinois to take advantage of the federally provided 80% matching funding targeted to environmentally sensitive areas. Without CREP, Illinois was scheduled to lose 342,121 acres from conservation lands expiring between 2018-2022. //



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#### YOUR SUPPORT IS CRITICAL

Renew your membership or become a new member today. prairierivers.org/donate

# **Middle Fork Updates**



## **Clean Water Act Complaint Filed**

Last January, PRN announced our intent to sue Dynegy for violations of the Clean Water Act. This May, we filed suit over their coal ash stored at the company's Vermilion Power Station which seeps pollution into the Middle Fork River. Stay tuned for updates in our efforts to stop Dynegy's pollution of Illinois' only National Scenic River.

## The People's Hearing

In June, the People's Hearing to Protect the Middle Fork gave the public a chance to learn more about the threat to the river and have their voices heard. The hearing was put on by the Eco-Justice Collaborative because there is no public participation built into the regulatory process for coal ash at this site. The Illinois EPA sent a member of their groundwater team to hear from the public, PRN presented on the regulatory history at the site, and other experts discussed the threats of pollution and bank stability.





## What's Next from Dynegy/Vistra?

Last year, the Illinois EPA requested that Dynegy study the groundwater under their coal ash and develop a computer model to simulate the transport of pollution in the groundwater. Vistra, who purchased Dynegy early this year, will be releasing a report on that study this October. The report will contain insight into how Vistra plans to close the site. We anticipate that their proposed solution will be to cap the coal ash, but this will not solve the problem of groundwater pollution or the threat posed by storing the coal ash close to the meandering river.