ISSUE 21 : SPRING 2022 OPEN RIVERS : RETHINKING WATER, PLACE & COMMUNITY

WOMEN & WATER : CALLING

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The cover image of Ann Raiho with a canoe, is courtesy of Natalie Warren.

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FEATURE **COLLABORATION FOR A COMMON GOAL** By Mollie Aronowitz, Jennifer Terry, Ruth McCabe, and Mary Beth Stevenson

We are four women who have joined our voices together to tell a rich and complicated story about protecting Iowa's soil and water resources. Our state is well known for being the top producer of corn in the nation; our landscape is peppered with animal confinements that have contributed to Iowa being the nation's top producer of eggs, chicken, and pork. However, these

agricultural achievements have come with significant environmental costs. The erosion of valuable topsoil leads to turbid rivers and lakes and threatens the long-term viability of our farms. Nutrient loss from farm fields leads to algae blooms and threatens the safety of our drinking water supplies. Iowans are increasingly clamoring for more aquatic recreational opportunities, but the water



Left: Coordinators meeting at an oxbox in the river. Right: With corn growing on the left, the wildflowers in the filter strip provide valuable habitat, as well as filtering runoff from the fields. Images courtesy of Mollie Aronowitz.

is often unsafe due to high levels of bacteria and suffers from poor aesthetic quality.

Divergent opinions have arisen about how best to restore and protect Iowa's critical freshwater resources while also maintaining high agricultural productivity. Balancing these interests has created divisiveness. Professionals who work in the fields of conservation, water, and land frequently find themselves at odds, facing obstacles and setbacks that hinder our work. Yet in the midst of these challenges, many of us find ourselves asking a common question: if not now, then when?

We seek to tell a story that demonstrates how combining a common goal with compromise and deliberate action leads to creative solutions and meaningful progress. Our professional backgrounds and experiences are diverse—our group includes a professional land manager, a clean water policy attorney, a conservation agronomist, and a municipal watershed manager. Through each of our personal stories, we will share examples of action-oriented strategies for improving the quality of Iowa's land and water. These stories, different in their origins but similar in their outcomes, will focus on the impactful change that comes from setting aside ego and agenda in favor of intentional action with a shared goal: sustaining Iowa's agricultural legacy while improving Iowa's water quality one field and stream at a time.

Mollie Aronowitz, Accredited Farm Manager (AFM)

In my line of business, it always starts with the land, and more specifically, the decision makers on the land. Farmland ownership is a privilege held by many in Iowa, with many still working the land, but more and more landowners identifying as non-farming. Those of us working at the intersection of agriculture and conservation spend significant time thinking about the roles and responsibility of the farmer, but what about the non-farming landowner?

Farmland ownership is a part of my family legacy. For 100 years, there has been a first-born son who has worked our family land. As the fifth generation, I will be the first female to take over management and the first generation to not personally operate the farm on a day-to-day basis. My family has been fortunate enough to find a young couple to live on our farm and enter a business partnership with us. Understanding our role as stewards of our farming legacy is the driving force behind a collaborative partnership with this young couple.

My family defines landownership as a responsibility to protect and improve the land we farm with a deep respect for the generations before us that laid the groundwork. Developing this identity did not happen overnight. A catalyst for this work was when my dad began managing farmland for non-farming landowners over twenty years ago. I followed him into the business ten years ago when I saw it as the clearest path to combine my commitment to the Iowa landscape and family connection. Facilitating landowner-tenant relationships across the state has provided a valuable opportunity to test ideas and practice processes. Finding the right combination of edge-of-field and in-field conservation practices for each farm is a continuous honing of best management practices with each new landowner and farmer I interact with.

Examples of Conservation Practices

Coming to the table with a farmer and landowner background has helped me tremendously as a land manager. I appreciate that each operation's balance sheet is unique, and I understand how the fickleness of Mother Nature can wreak havoc on a season. My request to each tenant is, "Help me understand." I want to hear the thought process behind the farming operation and the steps that tenant is taking to maximize production.

When we work with transparency, we begin to build the road map for future improvements. This starts with an annual reporting requirement of the tenant where they share inputs applied and bushels harvested. This information, layered with soil characteristics and fertility testing, can show us where we are maximizing productivity. It is often the case that we back into conservation work when the lower producing areas of a farm are often also where we have soil erosion and nutrient runoff.

When the landowner and tenant both focus on maximizing the most productive acres and protecting the environmentally sensitive acres of each farm, we change the relationship dynamic. Our ability to write an equitable lease and prioritize projects is enhanced; the tenant and landowner are both willing to invest in the farm because each see the value of the partnership.



Grassed Waterway: Water needs a way to move off a farm after weather events, whether it is subsurface or above ground. Grassed waterways are purposefully shaped and planted with strong-rooted grasses to help channel water above ground. The lighter area in the photo has been shaped and planted with grass seed in straw mat to help with establishment. Image courtesy of Mollie Aronowitz.

Sometimes the opposite of an equitable relationship happens. There are non-farming landowners who squeeze every last dollar out of a tenant to claim top rent bragging status on an annual lease. This can make it challenging for a tenant to justify investing in long term soil health benefits when margins are tight, and her/his tenure as a renter is in question.

There are also tenants who take advantage of landlords by misrepresenting market land values with unknowing landowners. In still other cases, the landlord might think their tenant is maintaining the ground when they are in fact depleting nutrients and overworking the ground.

Defining my role in our family operation, as well as working in a male-dominated industry, has inspired me to hold space for others who may feel separate from those at the table. I find I am better able to help landowners build out their own set of tools to address the specific concerns



Reduced Tillage: The photo shows soybeans soon to be harvested in a no-till operation. There are still traces of corn stalks standing between the soybean rows from the previous year. Less disturbance of the soil reduces chances of erosion and promotes soil health. Image courtesy of Mollie Aronowitz.

and opportunities on their farm. By working with landowners to execute farm contracts, implement farm repairs, and do the other necessary bootson-the-ground work, I am helping them define their own landowner identity.

In this article, you will hear from my colleagues who think daily on how to clean the water we use in Iowa. I have to admit that water quality rarely enters my mind when I turn on the tap. But I do think about how to build environmentally resilient and financially sustainable farms every day—and that includes consistent attention to our goals of keeping irreplaceable Iowa topsoil and expensive farm inputs out of our local streams.

I spend my days drilling down to what I can do out in the field with the farmer or at the kitchen table with a landowner. And by collaborating with Jennifer, Ruth, and Mary Beth, I have learned the



Cover Crops: The window of growing a cash crop is small in Iowa, but we know continuous living cover is good for the soil and reduces erosion. The photo shows spring soybeans planted into a strong stand of cereal rye planted the previous fall. We are learning how to extend the cover crop growth window with the rye terminated after soybean planting in this operation. Image courtesy of Mollie Aronowitz.

critical aspect of our collective success in protecting Iowa's natural resources is maintaining a broader picture and seeking out peers in the industry who are moving other levers with the talents at their disposal. Sitting through a policy working group session may not be my ideal way to spend an afternoon, but it does push my comfort boundaries and reignites a sense of urgency in the work we are collectively doing. Where success is measured by practices implemented and true minds changed, we must embrace the web of interconnectedness of our work. We must embrace the synergies and hold space for those who are completing critical work versus committee efforts that have more marketing polish than actual results.



Saturated Buffers: Draining farmland with subsurface tile is critical to corn and soybean production in Iowa, and we are learning how to treat tile water before it leaves the farm. The control structures shown in the photo direct tile water to lateral lines running parallel to the drainage ditch to allow water to filter through the soil before entering the stream. When given the chance, living roots are a willing and efficient cleaner of water. Image courtesy of Mollie Aronowitz.

Research demonstrates three main categories of barriers to conservation adoption: technical, financial, and social. I do not have the mathematical mind to engineer edge-of-field practices, nor do I have the patience for lobbying work for finance policy. What I have is the passion for relationships found on the gravel roads of Iowa; the fear that our land and downstream natural resources are the first to suffer when landowner and tenant relationships are neglected is what drives me. I help landowners and farmers work toward the shared goal of addressing soil health that improves productivity, protects long term value, and benefits our shared landscape. And my hope is that if I can help build the conservation ethic "muscle," then future heavy lifting brought by funding opportunities or policy changes will be easier and come more quickly.



Example of soil erosion on a farm. Soil leaving the farm reduces return on investment for both landowner and farmer. The soil moving here may seem minimal in the grand scheme, but the damaging effects can multiply over time. Image courtesy of Mollie Aronowitz.

Jennifer Terry, External Affairs Manager for Des Moines Water Works

Water is everything in my world, while the focus of my three colleagues is quite different than mine. Mollie thinks about how conservation practices increase ROI on agricultural land. Mary Beth thinks about the communities—urban, suburban and rural—who use water flowing from upstream ag operations. Ruth thinks about growing plants and managing nutrients for maximum benefit to the landowners. My world is different: I think about water all the time, from the surface water in our source rivers, to the treated water that flows through 1,000 miles of underground water mains and pipes, to the lifesaving water that we pump to 10,000 fire hydrants across the Des Moines metro region. My world is drinking water and the public health of 600,000 central Iowans.

In the summer, I wonder if our drinking water utility customers will water their lawns all at once, and we'll need to issue a water shortage alert. I wonder if our customers will call and ask us why their water tastes like algae or ammonia on a particular day. I prepare for a flurry of



Des Moines Water Works provides safe, affordable drinking water to 600,000 central Iowans from three treatment sites, including one on the Raccoon River in Des Moines Water Works Park. Image courtesy of Des Moines Water Works.

media inquiries on the days when spring rains wash record-setting amounts of nitrate through agricultural field tile lines upstream, triggering operation of nitrate removal vessels at a cost of U.S. \$10,000 per day.

The river flowing through our park that we use for source water here in central Iowa is brown and thick like chocolate milk from carrying soil, leaves, nitrate, and the remnants of upstream hog confinements. In spring, the river may be so low that you can walk across it, and when it does begin to rise, it will likely carry nitrate concentrations that far exceed the safe drinking water standards. Dirty river water polluted with farm chemicals, topsoil, and manure threaten the economic, recreational, public health, and social fabric of our state—my home state.

Our issues with polluted surface water are urgent, yet that sense of urgency is absent from most water quality conversations here in Iowa. It's typical to hear: "We just need more time;" "These problems didn't happen overnight, and they're



Nitrate concentrations in the Raccoon and Des Moines Rivers, two of our drinking water sources, are one of Des Moines Water Works' biggest water quality problems. Trending data show that nitrate concentrations in the rivers have steadily increased in the past 25 years and indicates a continuation of this upward trend. The operating and labor costs for the nitrate removal facility (pictured here) can add up to U.S. \$10,000 a day. Record high nitrate concentrations and toxins from Harmful Algal Blooms will demand significant future capital investments to remove the pollutants and provide safe drinking water to a growing central Iowa. Image courtesy of Des Moines Water Works.

not going to be fixed overnight;" or "There's no silver bullet."

Our utility constructed a nitrate removal facility 30 years ago; these problems are not new to anyone. Meanwhile, as a public water supply, our regulatory requirements under the <u>Safe Drinking</u> <u>Water Act</u> will not wait. Our engineering team plans, builds, maintains, and spends millions of dollars and hundreds of hours trying to stay ahead of agricultural pollution. We worry we won't be able to do that with increasing pressure from climate change and nutrient overload in our rivers.

Download a Fact Sheet on the Des Moines Water Works Nitrate Removal Facility.

So why do I continue to do this work of trying to clean up Iowa waterways when the "wins" are so small, and the work can be contentious?

I am the daughter of progressive Iowa dairy farmers. I learned early on some very basic tenets of life: contented cows give the best milk; fight to



Slow-moving, warm water combined with nitrogen and phosphorus in the Saylorville Reservoir upstream on the Des Moines River, north of Des Moines Water Works' treatment plant, have created harmful algal blooms for several years, causing unhealthy public beaches. Additionally, the blooms have exacerbated microcystin levels in the river, making treatment difficult or even impossible; the utility has to avoid the Des Moines River altogether for several months each year. Image courtesy of Des Moines Water Works.

preserve our farm ground; stand up for those who have less privilege; argue against the status quo it isn't popular, but that's okay. Those lessons drive my passion for cleaning up our rivers and providing access to affordable and safe drinking water for all.

Dirty water takes away the opportunity for kids to swim at public beaches and creates more expense to make river water safe to drink. Those kids' moms and dads and other adults are the customers who must foot the bill for that treatment. That's why I am driven to make Iowa water cleaner. It's a matter of justice, and that's something for which I'm willing to fight.

I love the excitement of new collaborations on a source water protection project, crafting legislative language, and telling our unique story about providing "water you can trust for life" to church



Jennifer Terry, External Affairs Manager with Des Moines Water Works (DMWW), collaborated with unlikely allies from municipalities and private industry in the joint purchase of a cover crop seeder. DMWW is the largest drinking water utility in the state and serves 600,000 Iowans. Nitrogen and phosphorus run-off from the watershed into the source water makes treatment challenging. The utility spends up to \$10,000 per day operating a nitrate removal facility when nitrate levels reach high levels—often in the spring. Cover crops are one way to minimize this nitrate-laden runoff. Image courtesy of Des Moines Water Works.

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groups, legislators, federal agencies, neighborhood organizations, and business lunch crowds. People love to hear about how their drinking water arrives at their tap.

I have led tours of college students on cold snowy days through our treatment campus, petitioned the state's natural resource regulatory agency to strengthen oversight of agricultural contaminants, argued with water quality deniers on panels at conferences, and presented facts about our lawsuit against agricultural drainage districts upstream to both friendly and hostile audiences.

Past collaborative attempts have sometimes been frustrating and failed. I have been personally

attacked with email campaigns. Complaints about me have been lodged with my boss and even the chairman of our board. I have been accused of being "too direct," of being "anti-agriculture," of *not* being anti-agriculture enough.

I have come to realize that an effective way to make change in the world of water is by thinking about this work in terms of a community—and I am one part of that community. My laser focus on drinking water is just one facet of the water quality work. I will use my finite amount of time and energy to seek partnerships with people whose focus is different from, but as important as, mine. I will work with people whom I trust, people who share my values. I choose to work



Des Moines Water Works collaborated with the City of Des Moines, Polk County, and the Iowa Department of Agriculture to purchase a U.S. \$600,000 cover crop seeder. Heartland Co-op will lease the machine to farmers in hopes of increasing practice adoption to improve source water quality. Image courtesy of Des Moines Water Works.

with three unlikely but amazing allies—women who come to the table with an openness and authenticity that is driving real change.

I have partnered Mollie, Ruth, and Mary Beth on innovative pilot projects such as nonoperator landowner "boot camp" with Mollie that unites drinking water education with conservation and tenant-farmer relationship strategies. I recently rode in a U.S. \$600,000 cover crop seeder just north of the city with Ruth. Our utility contributed with other municipalities to purchase the machine, and now Ruth and her team will go about "selling" cover crop adoption to landowners. Mary Beth is on the ground floor of a newly formed "Nutrient Collaborative for Public Water Supplies" group we founded in 2021 to build a community of water utilities that struggle with nutrient pollution.

We're not afraid to think big or come up with new ideas to advance healthy land, clean water, and a strong social fabric in urban and rural Iowa. The creativity and tenacity required for projects like these is great, and our team is up for the challenge.



Des Moines Water Works engineering staff builds and maintains 1,000 miles of underground water mains and pipe and pumps lifesaving water to 10,000 fire hydrants across the Des Moines metro region. The utility has been serving the region for 101 years. Water quality has degraded the past few decades due to agricultural contaminants, making treatment of the river water to make it safe to drink more difficult. Ponds throughout Des Moines Water Works Park, a 1,500-acre urban recreational gem, help filter river water before it enters the treatment plant. Image courtesy of Des Moines Water Works.

Ruth McCabe, Conservation Agronomist

They say you can catch more flies with honey than with vinegar. On a hot, sultry Iowa summer day in August 2021, as I scratched yet another mosquito bite, I ruminated on that thought while stumbling through a field of waist-high soybeans behind two cousins who farm together in southeast Iowa. I woke early that day to drive two hours to meet them at their first field by eight o'clock in the morning. I was sweaty, hungry, and tired, and we had several hours to go before we were done visiting all their fields.

Despite my physical discomfort, I was in a great mood that morning. It had taken me three months of friendly persistence to finally convince them to meet with me for a conservation assessment. Together, they manage nearly two thousand acres of grain crops, and they use cover crops on roughly half those acres. They wanted to adopt more conservation practices and didn't know where to start. However, for a variety of reasons, they didn't trust "traditional" conservation professionals to help them. From their perspective, I had finally proven my worth because, so far, I'd offered them helpful advice without judgment. I'd even clued them into a private cost-share program to supplement their state cost-share dollars, finally getting them in the black for half the acres on which they used cover crops.

The conversations we had that day were very different from the ones we'd had in more public spaces. They talked excitedly about the species of birds they'd seen in their native grass filter strips. They marveled at the fact that during the spring drought their soil had moisture when their neighbors' soil was as hard as cement. They asked me questions that they weren't comfortable asking their sales agronomist, such as "does fungicide have a bad effect on soil microbes?" Perhaps most importantly, they showed me every acre and trusted that I would offer them unbiased conservation guidance based on their business needs without opining on how they had managed their land up to that point.

What does my experience that day have to do with flies, honey, and vinegar? In my role as a conservation agronomist for a large agricultural cooperative in the Upper Midwest, I work in two industries: conventional agriculture and conservation. Professionals in both worlds view me with suspicion or as a tool to further their own narrative. Farmers fare no better than I do in that respect. No, this isn't another story using the "farmers as victims" trope—far from it. But farmers have definitely learned to keep their cards close to their chest and their willingness to consider management changes limited to the people and conversations they can trust. In other words: the interactions that bring them honey.

Every day, my goal is: another grower, another conservation practice, another acre. It's a brutal fact that conservation farming doesn't "yield" as much as conventional farming. Given the nature of what I "sell," I am not going to convince growers to change their current management practices by using data to shame them or using phrases like, "It's the right thing to do." I serve as a catalyst for change when I meet a farmer at their workbench, and we talk about their farm as it is right now. I don't drag the past into the conversation, and I don't wax fearful about the future. I focus on bringing them value, either through my willingness to solve problems or my ability to find another dollar for them to adopt change.

Thus far, my work has resulted in over 60 hours of educational outreach, 16,000 acres of cover crops, 1,000 acres of improved nutrient management practices, 60 tile outlets treated with saturated buffers or bioreactors, 200 acres enrolled in the <u>Conservation Reserve</u> <u>Program</u>, and funding the landowner match on a small wetland constructed the summer of 2021 that drains 138 upland agricultural acres. Using



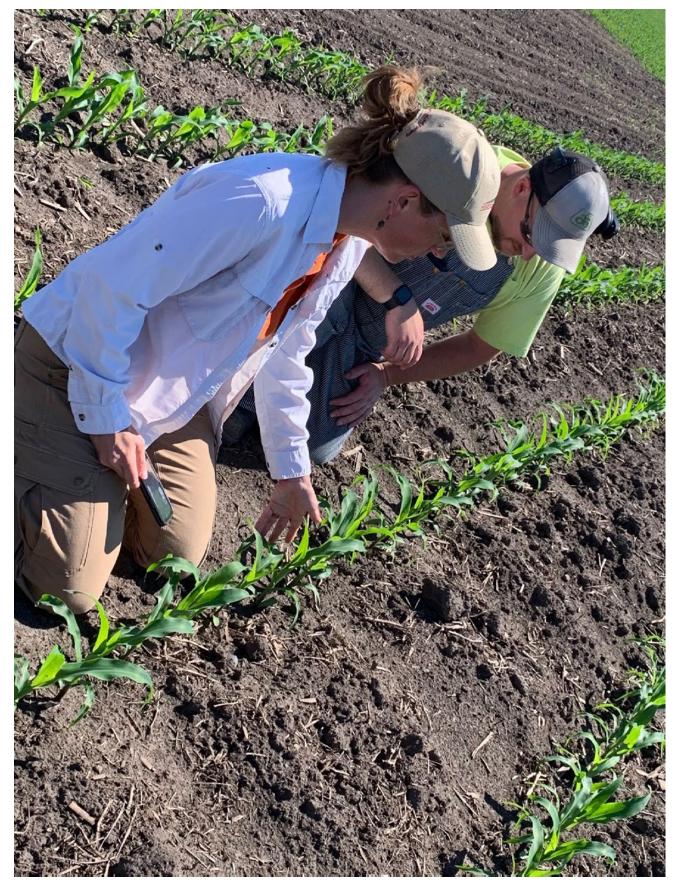
Two of Ruth's farmers walking ahead of her in a soybean field. Image courtesy of Ruth McCabe.

reduction estimates outlined in the <u>Iowa Nutrient</u> <u>Reduction Strategy</u>, these practices "removed" roughly 112,000 pounds of nitrogen and 3,500 pounds of phosphorus from downstream water in the last year and a half. Many of these practices will continue to remove nutrients into the future. By any standards, these outcomes are an impressive feat. Did I work alone? No, I did not, and I'll tell you the truth: a good partner is the difference between success and failure.

So, what defines a good partner? From my perspective, good partners work toward physical conservation deliverables without undue emphasis placed on having their logo front and center. A "good partner" isn't another talking head, and they leave egos and battle axes at the door in favor of achieving change. In practice, this manifests as effective partnerships. Jennifer Terry and I recently partnered on a cover cropping <u>machinery program</u> that has two primary goals: targeting their priority watersheds with cover crop application and building a sustainable business model within my ag retail cooperative. Our project is the first of its kind in Iowa. While it is only in its infancy, we can already lay claim to 3,000 acres of cover crops planted after a mere ten days of having the machine. When the project is done, we will have planted a minimum of 31,000 acres and very likely more.



A farm field of cover crops planted fall of 2020. Image courtesy of Ruth McCabe.



Ruth and a farmer discussing soil health. Image courtesy of Ruth McCabe.

Our work doesn't stop at actual practice change either. Jennifer and I partnered with Mollie Aronowitz in the summer of 2021 to create four educational workshops aimed at nonoperating landowners who want to adopt on-farm conservation. The series continues to be available online for free and our primary goal in that partnership was creating access to free conservation education for landowners. Finally, with a focus on source water protection and improvement, I'm working with Mary Beth on a large regional conservation partnership program called the Cedar River Source Water Partnership. This large-scale project links cities in the Cedar River watershed that have vulnerable drinking water supplies to their agricultural neighbors through on-the-ground conservation implementation and agronomic support from multiple conservation agronomists, ag retail partners, and watershed management authorities.

Why is my work with Jennifer, Mollie, and Mary Beth so important to me? In one way or another, each of these projects prioritizes on-the-ground conservation deliverables with far less emphasis placed on promoting the partnership organizations themselves. I'm grateful because I've been able to build professional partnerships where increased conservation is our guiding light. I've chosen partners who will sweat alongside me in this work, as we prioritize results over notoriety, collaboration over credit. I can focus on my true value knowing that my partners will be doing the heavy lifting with me. How do I see the value of our work? We are the EMTs for farm health, soil health, source water quality, and sustainable land use. Other folks can do the talking; we are focused on stopping the bleeding. And although we might never see the benefit of the work that we do in our lifetimes, my hope is that our success will change the conservation paradigm going forward.

Mary Beth Stevenson, Watersheds & Source Water Coordinator for the City of Cedar Rapids

As an advocate for farming practices that protect water quality, my work is in close alignment with Ruth, Mollie, and Jennifer. A key undercurrent of our collective work is to demonstrate how intelligently caring for the land is the most basic and effective way to improve and sustain healthy water resources. When citizens understand their place in a watershed, they recognize the fragile connection between land and water.

I moved to Iowa soon after the catastrophic Flood of 2008 drowned 1,126 city blocks in Cedar Rapids and forever changed the way Iowans relate to their rivers. The flood brought a new awareness of the importance of working across city and county jurisdictions to effectively manage our water resources. Within several years of the flood, the Iowa legislature passed new laws to pave the way for collaborative water resource management. Joining together for a collective effort to fight floods and improve water quality became a statewide priority.

I now work for the City of Cedar Rapids managing partnerships and programs to improve the Cedar River watershed. The city faces the same critical watershed issues as much of Iowa: chronic flooding and threats to drinking water quality from agricultural chemicals. The city is located near the bottom of the Cedar River watershed, and nearly 7,000 square miles of prime agricultural land drains toward Cedar Rapids through the Cedar River. The river influences the water quality of the alluvial aquifer that supplies our drinking water and unfortunately carries a heavy load of synthetic agricultural fertilizers and manure, as well as pesticides such as atrazine and metolachlor.

Addressing our challenges with water quality and flooding requires action on every acre

of farmland. The participation of farmers is essential for success. However, farmers are not required through regulation to prevent fertilizer runoff from polluting the Cedar River. Due to various economic and social barriers combined with the lack of a regulatory mandate, farmers are not implementing nearly enough conservation measures to adequately safeguard water quality for rural residents and Cedar Rapidians alike.

Agriculture is an essential component of the Cedar Rapids economy. We process more corn and soybeans on a daily basis than any other city in the world and provide a significant portion of our treated drinking water to major food processing industries. Agriculture is important to us because of the economic opportunities, and in turn, we provide a market to farmers for their crops. We rely on farmers, and farmers rely on us. So in a Midwestern city that highly values its relationship with agriculture, what happens when it becomes painfully obvious that the lack of conservation practices on upstream agricultural areas is leading to potentially significant issues for our community?

There is no how-to guide available on how cities can successfully work with their agricultural watershed neighbors. We all have to chart our own course and test out new strategies and partnerships. Not all partnerships and strategies have led to on-the-ground conservation success. In some ways, we have had to recalibrate our notion of what success looks like. Success can't always be measured based on water quality improvements alone (though that is certainly the end goal), and it definitely isn't measured by the amount of money we are throwing at the problem.



Protecting our watersheds safeguards drinking water supplies, reduces flooding, and allows for valuable recreation opportunities. Image courtesy of Mary Beth Stevenson.

I have observed that the City's willingness to unfailingly show up and be a part of every watershed conversation has paid dividends. Our good faith effort has led to meaningful partnership opportunities—public and private—such as the Cedar River Source Water Partnership effort that Ruth described above.

In my watershed world, success usually takes the form of the small daily steps we take to reach our ultimate goal: clean water and healthy lands. This could be securing a new grant to hire a watershed coordinator to help farmers adopt conservation practices. Or the City's budding partnership with ag retail to support them in proving out a business model that doesn't just sell agricultural chemicals, but also leads to greater conservation activities on the ground. Sometimes success takes the form of setting aside our political differences and sitting around a table to build a partnership that may take years to bear fruit, like



The author in front of a woodchip pile destined for a denitrification bioreactor on a farm field owned by the City of Cedar Rapids. The bioreactor is anticipated to reduce nitrate levels up to 60 percent from a farm tile drain that outlets to Indian Creek in Linn County, Iowa. The City of Cedar Rapids has provided direct financial contributions to assist farmers with building conservation practices, such as denitrifying bioreactors, in partnership with groups such as the Indian Creek Watershed Management Authority. Image courtesy of Mary Beth Stevenson.

the local governments that form the Lower Cedar Watershed Management Authority have recently done.

The City's willingness to establish my position in the utilities department has enabled us to engage in watershed efforts and has created new ways for us to plug in and connect with our watershed neighbors. Grant writing, project administration, and watershed and source water protection planning are ways that I can contribute to the broader effort.

Our most important strategy to protect the City's drinking water supply is to meet frequently with farmers and other engaged stakeholders in the

Cedar River watershed. Our investments of human capital and face-to-face contacts have helped us to build trust and credibility. We have gained a platform with new audiences where we say in a direct and honest manner: "Yes, the activities on your farm are polluting the shallow aquifer that supplies our drinking water. But we want to support you in efforts to adopt nutrient reduction conservation practices. How can we work together?" Through strategic partnerships with conservation agronomists like Ruth, land managers like Mollie, and progressive water utilities such as Jennifer's, we will continue to make progress toward our drinking water protection goals.

Conclusion

In some ways, the four of us—Mollie, Jennifer, Ruth, and Mary Beth—couldn't be more different. But three passions unite our work: protect the land, protect the water, and protect our fellow Iowans. It seems so simple. It doesn't matter to this group who gets credit for the wins or whose picture is on the news. Our egos are not attached to our work—and that is refreshing. In the current state of political affairs in Iowa and the nation, "partnership" has almost become a dirty word. But never has the need been greater for us to set aside our differences and identify a path forward to achieve our goals. Now is not the time to sit on our hands. Partnership matters. Collaboration matters. Joining our voices together matters. And through these partnerships, we are effecting change.

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About the Authors

Mollie Aronowitz is Land Manager and Sustainability Director with Peoples Company, a farmland real estate, management, appraisal, and investment services firm based out of Clive, Iowa. Peoples Company started in central Iowa and now has a national footprint with the ability to serve all major agriculture markets as a full-service national farmland transaction company.

Jennifer Terry developed her passion for protecting land and water while growing up on a Hardin County dairy farm. After a career in the healthcare field, she returned to college and received a law degree from the University of Iowa College of Law in 2013. Besides policy and law, she has a keen

interest in communications strategy. As external affairs manager for Des Moines Water Works, she oversees public relations, government affairs, and coalition-building efforts around clean water. In addition to the Iowa State Bar Association and Polk County Bar Association, Terry is a member of Practical Farmers of Iowa, Iowa Interfaith Power & Light, Iowa Farmers Union, Iowa Natural Heritage Foundation, Iowa Environmental Council, NRCS Women, Land and Legacy State Team, and has served on the board of the Raccoon River Watershed Association.

Ruth McCabe has a B.S. in applied plant science from the University of Minnesota and an M.S. in crop production and physiology from Iowa State University. She has focused her research and career on increasing support and visibility for sustainable agricutture in the Midwest. Ruth is a Certified Professional Agronomist and an Iowa CCA, and she currently works for Heartland Cooperative in the Middle Cedar Watershed. Prior to Heartland, Ruth has worked as a technical agronomist, sales agronomist, and research agronomist for various companies based around the Midwest. She lives on a small farm in State Center, Iowa with her husband, dog, and many chickens.

Mary Beth Stevenson serves as the Watersheds & Source Water Coordinator for the City of Cedar Rapids. She supports the City's engagement in watershed-based efforts to improve water quality and reduce flood risk. Mary Beth works on partnership development, grant writing and management, and coordinating source water protection activities in the watershed.