

JANUARY 2026 | Rathbun Regional Water Association

QUENCH

news by the glassful



EVANSDALE, IOWA

Wastewater Treatment Plant Rehabilitation

Working Together to Improve
Water Quality in Iowa

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NOTICE OF ANNUAL MEETING

Dear Member:

Please take notice that the annual meeting of the general membership of the Rathbun Regional Water Association, Inc. will be held at the RRWA Administrative Office and Treatment Plant located at 16166 Hwy J29, Centerville, Iowa. The meeting will be held on February 26, 2026, and called to order at 7:00 p.m.

The purpose of the meeting will be for the regular election of Directors whose terms expire in 2026. Those names and the names of those nominated to fill the vacancies are listed below. No nominations by petition were received in any of these districts.

A report of the financial condition of the Association and the primary activities of the Association during 2025 will be presented.

Members then may consider the transaction of any other business which may come before the annual meeting.

Each member present at the annual meeting will be entitled to cast one vote for each directorship to be voted upon, and one vote for any other issue that may come before the members.

Those board members whose terms expire in 2026 are: Denny Amoss, Doug Goblen, and Curt Frank.

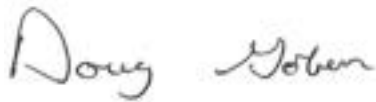
Those nominated to fill the position of Directors whose terms expire are:

District 2: Denny Amoss – 6040 170th Street, Albia, IA 52531

District 3: Doug Goblen – 1643 100th Street, Corydon, IA 50060

District 7: Curt Frank – 3591 250th Street, Oakville, IA 52646

The nominees receiving the most votes in each district where vacancies exist will be declared to have been elected.



Doug Goblen

Secretary/Treasurer

Rathbun Regional Water Association, Inc.

RRWA BOARD OF DIRECTORS

Randy Eddy *CHAIRPERSON*

Denny Amoss *VICE CHAIRPERSON*

Doug Goblen *SECRETARY/TREASURER*

Curt Frank

Garry Schiller

Ken Wuthrich



BIOGRAPHY OF NOMINEES

DISTRICT 2

Denny Amoss and his wife Karen of 54 years reside at 6040 170th Street near Albia, Iowa. They have two grown children, Troy Amoss and his wife Lori; Lynnette Major and her husband Josh; all of Albia and seven grandchildren. Denny is a retired Road Foreman for Monroe County. Denny is also a Monroe County Fair Board member, FFA Alumni member, serves on the board of the Rathbun Land and Water Alliance, and served as a Monroe County Board of Supervisor. He and his wife are involved in many community and church activities. He has enjoyed his last 12 years as a Board of Director and looks forward to the opportunity to again serve the patrons of RRWA.

DISTRICT 3

Doug Goblen and his wife Denise live on a farm northwest of Corydon at 1643 100th Street and have a small livestock and row crop operation. They have three grown children, Jake (Cheri), Cole (Jennifer) and Sadie (Brett) who all reside in Wayne County and seven grandchildren. Doug served on the Soil and Water Conservation District as a Commissioner and was a member of the Chariton Valley RC&D Board. He has enjoyed being on the Board for the last 12 years and would appreciate your vote to continue serving RRWA as a Board member.

DISTRICT 7

Curt Frank and his wife Kathy live in Mediapolis, Iowa and operate a grain and hog operation in the Oakville area. They have been married for 47 years and have eight children and 28 grandchildren. Curt has served on the Des Moines County Drainage Board for 28 years and the Two Rivers Levee and Drainage district. He also has served on the Mediapolis Ambulance Service. Curt has enjoyed serving on the RRWA Board and looks forward to serving in the future years.



RRWA is saddened to share the unexpected passing of Board Member **Charla Warner** on September 8, 2025. Charla served on the Board for six years, being appointed and then elected after her husband Charles passed away to continue representing their district. Her dedication and professionalism will be greatly missed. RRWA extends heartfelt condolences to her family.

RRWA Customers REALLY LOVE Online Bill Payment

No More Reading the Meter, No More Writing and Mailing Checks

Close to 10,000 RRWA customers now pay their water bills online. RRWA offers two secure and convenient online bill payment options for customers, Auto-Pay and E-Pay.

Auto-Pay will automatically calculate your monthly water bill, notify you by email of your usage and the amount owed, deduct this amount from your bank account, and credit the amount paid to your RRWA account. You must have a smart meter to use Auto-Pay.

E-Pay will calculate your monthly water bill after the meter reading is entered online. Then, you confirm payment of the amount owed from a bank account or credit card. You can use E-Pay with or without a smart meter.

Are you interested in signing up for online bill payment? Call 800-233-8849 to speak with your customer service representative. And don't forget to ask RRWA to install your FREE Metron smart meter!

Ask RRWA to install your FREE smart meter!



Ask RRWA first about water for your new home or business.

Please Ask RRWA First!

Have you picked out that perfect spot to build your new home?

Are you planning to start or expand your livestock facility or business?

Newly constructed houses and expanding livestock facilities and businesses are common across Rathbun Regional Water Association's (RRWA) service territory. RRWA is proud to be able to support this home construction and business expansion. In most cases, water service from RRWA is readily available for these houses and businesses. However, it is always important to ask RRWA to confirm the availability of water at the site of your new home or to meet the needs of your new or expanding livestock facility or business.

RRWA supplies drinking water to residents and businesses in the rural areas of more than 18 counties and 63 communities in Iowa and Missouri. RRWA distributes drinking water from the Association's two treatment plants and water purchased from municipal partners through thousands of miles of pipelines and dozens of water towers and pump stations. As demand for drinking water has increased, there are areas in RRWA's distribution system where improvements may be needed to satisfy additional requests for service. It is also important to know that RRWA's distribution system is not designed to provide water flows required for fire protection. RRWA maintains hydrants at water tower locations throughout our service territory where fire departments can obtain water. Please remember, ask RRWA about water service as one of the first steps when you are planning to build your new home or expand your livestock operation or business.



RRWA Sends New Public Notices to Customers

Did you receive a public notice email or letter from RRWA about your water service line? RRWA recently sent a new round of public notices to customers as part of the Association's lead service line inventory. This notice informs customers that RRWA has still not been able to determine their water service line material. The notice also asks customers to help RRWA identify their service line material. RRWA is required to obtain this information about our customers' water service lines as part of a nationwide effort to identify and remove any lines made of lead.

Please Help RRWA Identify Your Service Line Material

If you received a public notice email or letter, please help RRWA identify your water service line material. Please visit the Lead Service Line Information page on RRWA's website at <https://www.rrwa.net/lead-service-line-information.aspx>. You can use the Lead Service Line Inventory Map or Lead Service Line Survey on that page to provide information about your water service line material to RRWA. You can also call RRWA at **800-233-8849** to provide this information to Association staff. Thank you for taking the time to help RRWA!



L-R: AWWA Representative; IA-AWWA Chair, Julie Sievers; Marty Braster; AWWA Representative

2025 Outstanding Service to the Water Profession Award

RRWA's Support Services Officer, Marty Braster, was honored with the 2025 Outstanding Service to the Water Profession Award at the Iowa Section of AWWA's Annual Conference in Cedar Rapids, Iowa. The Outstanding Service Award recognizes and honors water professionals who have demonstrated outstanding service to the water industry through leadership and volunteerism.

Marty has been an essential member of the RRWA team for the past 25 years and has been deeply involved in the Iowa Section of AWWA, the Iowa Rural Water Association, and the Iowa Association of Water Agencies — where he recently completed his second term as president.

Marty received this prestigious recognition not only for his leadership within these organizations, but especially for his extraordinary contributions to source water protection, both at Rathbun Lake and across the country.

Under Marty's guidance, RRWA became a founding member of the Rathbun Land and Water Alliance (RLWA), whose mission is to protect and enhance land, water, and economic resources throughout the Rathbun Lake Watershed. At the core of this mission is the protection of Rathbun Lake, as RRWA's primary water source. Marty's vision and leadership have helped shape RRWA's source water protection program and strengthened its long-standing partnership with the Alliance.

Since source water protection efforts began in 2004, RRWA and its Alliance partners have committed nearly \$40 million toward developing and implementing the Rathbun Lake Watershed Management and Source Water Protection Plan.

The success of these efforts has been so significant that Marty is frequently invited to speak across the region about the accomplishments at Rathbun Lake and the model it provides for other communities and watersheds.

Please join us in congratulating Marty Braster on this well-deserved honor and in thanking him for his tireless dedication to protecting water quality at Rathbun Lake.

RRWA *Service Beyond Drinking Water*

Rathbun Regional Water Association (RRWA) is the largest rural water system in Iowa. RRWA supplies drinking water to thousands of residents, farms, and businesses in more than 18 counties and 63 communities across southern Iowa and northern Missouri. RRWA's commitment to the people we serve goes beyond delivering safe, reliable, and affordable drinking water. Many are surprised to learn that, for more than 25 years, RRWA has also provided wastewater treatment services for communities in our service territory. RRWA's Chief Executive Officer, Rod Glosser, explains, "RRWA's role in making wastewater services available to our customers is consistent with the Association's priorities of supporting economic growth in rural communities and promoting environmental stewardship."

Wastewater Challenges in Small Communities

Small communities in Iowa without a centralized wastewater collection and treatment system can have a large number of homes and businesses with outdated and poorly functioning private septic systems. In these communities, the presence of inadequately treated wastewater in yards and ditches is a local public health and environmental concern. Negative health and environmental impacts can extend beyond the community as partially treated wastewater flows into nearby waterways. Importantly, this discharge of improperly treated wastewater is not permitted by law in Iowa and must be addressed.

Unfortunately, addressing the wastewater treatment needs in small communities can be challenging. Replacing outdated and failing septic systems is very expensive for individual homeowners. Additionally, in many cases the land area available on residential lots in small communities is not large enough to install a properly functioning septic system. At the same time, the construction of a centralized system to collect and treat wastewater for a small community often takes years to complete and costs millions of dollars. In many cases, small communities do not have the state-certified personnel or equipment required to operate and maintain a centralized wastewater collection and treatment system.

RRWA Steps Up to Help Communities

In the early 1990s, residents of several communities in RRWA's service territory were faced with the need to address the large number of homes with improperly functioning septic systems. Local officials worked with representatives of the Iowa Department of Natural Resources (DNR), Iowa Department of Economic Development (IDED), and USDA Rural Development to evaluate alternatives for wastewater treatment in these communities that would be effective and affordable for residents. RRWA was quickly identified by those working on this effort as the one regional entity capable of planning, designing, funding, constructing, owning, and operating multiple community wastewater systems. The Board of Directors and staff at RRWA recognized the important role the utility could play in assisting these communities, all of which received their drinking water from the Association. As a result, RRWA stepped up to assist these small communities at a time when they had no one else to turn to for help to address their need for wastewater services.



RRWA wastewater systems require year-round attention.



Lagoons at an RRWA community wastewater system.

For several years, RRWA, city officials, and staff with the DNR, IDED, and USDA worked together to secure the engineering services, financing, and contractors needed to construct wastewater collection and treatment systems for the communities of Exline, Avery, Lucas, Pulaski, and Unionville. By the end of 1998, the residents and businesses in these communities had access to wastewater services as a result of these systems. In the years that followed, RRWA provided the leadership and resources required to help the communities of Drakesville, Douds/Leando, Williamson, Melrose, and Plano construct and/or operate wastewater collection and treatment systems. RRWA also provides drinking water for the residents and businesses in these communities.

RRWA's Community Wastewater Systems

Today, RRWA owns and operates wastewater collection and treatment systems in ten communities. These systems include service lines, mains, manholes, lagoons, and, in some cases, pump stations. RRWA's Wastewater

Superintendent, Richard Brooke, is responsible for the operation and maintenance of these systems. Richard's duties include overseeing and making improvements and repairs to collection system components. This work can involve installing new services, clearing plugged mains, and replacing pumps. Richard also monitors the condition and performance of the treatment lagoons which includes conducting water quality analyses before and during semi-annual discharges to ensure compliance with state and federal requirements. Richard comments, "While many people we serve may not realize how much work and funds RRWA puts into our wastewater systems, almost all our customers appreciate the fact that we take care of this need for them."

RRWA now provides essential wastewater services to more than 700 residents and businesses in these ten rural communities. The efficiencies realized by RRWA's ownership and operation of the ten systems have made these services as affordable as possible. Currently, customers pay an average monthly wastewater bill of \$30.50. RRWA's commitment to

the people and communities we serve led to the decision more than 25 years ago to take action to address this pressing need. That decision by RRWA's Board of Directors and staff, to provide service beyond drinking water, has had a positive impact on the quality of life in our service territory.



RRWA's Wastewater Superintendent, Richard Brooke, at a lagoon discharge structure.

EMPLOYEE SPOTLIGHT

ANDREW HUNOLD

Field Area Representative

Andrew Hunold lives in Donnellson with his wife, Toni, and their three children, 12-year-old twin boys and a 9-year-old daughter. As a family, they love spending time outdoors and are always up for an adventure, whether it is hunting, fishing, or exploring new hiking trails in state parks.

Andrew has been a Field Area Representative with RRWA since 2013. In his role, he wears many hats, including meeting with customers, locating and marking water mains, assisting the construction crew, collecting water samples, and flushing water mains to help ensure water quality and safety. RRWA's area representatives are also on call around the clock throughout the year to respond to emergencies, something Andrew approaches with dedication and professionalism.

One of Andrew's favorite parts of his job is getting out into the community and meeting new people. Outside of work, Andrew continues to enjoy the outdoors through hunting, fishing, and other activities. Something many may not know is that he also owns and operates an excavating and dirt-work business in Lee County.



STEPHANIE ROSE

*Accounts Payable Clerk/
Customer Service*

Meet Stephanie Rose, a valued member of Rathbun Regional Water Association (RRWA) for the past three years. Stephanie grew up in Seymour and now enjoys life in rural Centerville with her husband, Matt, and their two sons — Gage (8) and Kaiden (6).

Stephanie's main responsibility at RRWA is accounts payable where she oversees all invoices are paid in a timely manner. She is also an asset in all areas of the customer service department, where she brings positivity, dedication, and a genuine love for her co-workers. She says one of her favorite parts of her job is being part of a great company surrounded by supportive teammates.

Outside of work, Stephanie and her family enjoy camping and spending quality time together. Something you may not know about Stephanie is she is a fan of trap shooting! While she insists she is "not a great marksman," Stephanie has won "Had the Most Fun" Prize the last two years at an IRWA shoot fundraiser. Another fun fact? Stephanie is an enthusiastic collector of all things Charlie Brown.

We are grateful to have Stephanie on the RRWA team and appreciate everything she brings to the workplace!



There Has Never Been a Better Time to Protect Your Farm and Rathbun Lake!

Soil Erosion Threatens Farmland and Rathbun Lake

Farming in southern Iowa comes with plenty of challenges. One of these challenges is the potential for soil erosion on land used to produce row crops. If left unchecked, soil erosion can severely damage affected areas of fields causing a long-term loss of farm productivity. Fortunately, landowners and their farm operators can install conservation practices that will help control soil erosion on many row crop fields. In some cases, the threat of soil erosion is so great that landowners and operators must consider changing the land use on fields from row crops to pasture or hay production. These decisions to apply conservation practices or change land use not only protect farmland, but they also reduce the amount of sediment carried in runoff to water bodies like Rathbun Lake. Rathbun Lake is the only source of water for Rathbun Regional Water Association's (RRWA) two water treatment plants. RRWA supplies drinking water to the rural areas of more than 18 counties and 63 communities in southern Iowa and northern Missouri.

Assistance is Available to Install Conservation Practices

Landowners in the Rathbun Lake watershed can apply for assistance to install conservation practices on their farms from the Protect Rathbun Lake Regional Conservation Partnership Program (RCPP) Project. RCPP is a program of the USDA Natural Resources Conservation Service. The program combines local, state, and federal funds and staff to assist landowners install conservation practices that will help control soil erosion on their farms and protect water quality in Rathbun Lake. The practices most often installed by landowners in the Rathbun Lake watershed include terraces, grade stabilization structures (ponds), water and sediment control basins, cover crops, grassed waterways, and pasture and hay planting. Professional staff assist landowners to plan, design, and install these practices. For most practices, landowners can receive financial assistance that will cover 75% of the installation cost.



Soil erosion can severely damage crop fields.

Apply Now to the Protect Rathbun Lake RCPP Project

Landowners who would like assistance to control soil erosion on their farms in the Rathbun Lake watershed can apply to the Protect Rathbun Lake RCPP Project. Interested landowners should visit or call their local soil and water conservation district (SWCD) office. The addresses and phone numbers for SWCD offices in the watershed can be found on the Iowa Department of Agriculture and Land Stewardship website at <https://costshare.iowaagriculture.gov/districts>.

It's That Time of Year Again... Brrr!

Please Check Your Meter Pit Cover and Frost Lid

Winter is here! Don't let the cold weather freeze your water service. RRWA customers should make sure the lid on top of your meter pit fits tightly. You should also check the frost lid inside the meter pit. The frost lid must fit snug on the inside lip of the meter pit. Frost lids can be made of Styrofoam, plastic, or aluminum depending on the style of your meter pit. The frost lid helps hold in heat from the ground to keep your meter pit from freezing when the temperature outside drops during the cold winter months. Remember to inspect your meter pit for any damage. Please contact RRWA if your meter pit is damaged or if you have any questions about your water service by calling **800-233-8849**.



Frost lid positioned inside meter pit.



Properly placed lid on top of meter pit.

WORKING TOGETHER

to Improve Water Quality in Iowa

There are a lot of conversations happening about Iowa's water quality. Water is central to the health of our families, farms and communities. For rural water utilities, providing safe, reliable drinking water is a critical public service, and I have a tremendous amount of respect for the work you do.

Water quality is influenced by a wide range of factors. Non-point source runoff, water treatment capacity, seasonal weather patterns and stream flow variability all interact in complex ways. Nitrate levels are heavily influenced by rainfall, snowmelt and river flows, and these are variables none of us can control.

Nitrates in source water come from a variety of sources, including our naturally high organic soils, farm activities, suburban and commercial lawn care, businesses and industries. No one source or activity is the singular cause, and there's not a one-size-fits-all solution. Real, meaningful progress happens when we all work together.

The Iowa Department of Agriculture and Land Stewardship (IDALS), Iowa Department of Natural Resources (IDNR) and Iowa State University (ISU) are working alongside more than 450 public and private partners to implement the Iowa Nutrient Reduction Strategy (INRS). Rural water utilities have long been a cornerstone of this partnership. Every day, you work to meet EPA's federal drinking water standards, often under tight budgets and increasing demand. Your hard work and dedication are visible in every community you serve.

Farmers and landowners also play a critical role in improving Iowa's water quality. We lead the nation in corn, egg, pork and biofuel production, and today our farmers are also national leaders in conservation. Iowa continues to add buffer and filter strips, grassed waterways, water quality wetlands, conservation tillage, bioreactors, pollinator habitat, terraces and saturated buffers. These practices are outlined in the INRS and yield both positive environmental and production outcomes.

Implementing the INRS is a long-term effort requiring engineering expertise, construction capacity, sustained funding and the willingness of farmers and landowners to make meaningful changes. There are no shortcuts and no silver bullets, but we've seen this approach work before. Iowa's significant phosphorus reductions were achieved over decades of consistent, farmer-led soil conservation efforts. Now, we're expanding our focus to implementing nitrogen-reducing practices.

Momentum continues to build across the state. We saw strong adoption of conservation practices in 2025 and successfully completed both rural and urban water quality projects. Iowa farmers are now

planting nearly four million acres of cover crops, up from about 10,000 acres a decade ago. We began construction on 26 water quality wetland projects in 2025, the most in a single year. We've expanded our cattle and conservation working lands project to eight counties. Our successful "batch and build" project is working with multiple landowners in 28 counties to add nitrogen-reducing practices along the edges of farm fields.

And we're continuing to do more every year. In FY2026, I'm allocating \$3 million to support a streamside buffer pilot project. It encourages farmers and landowners upstream of the Des Moines, Raccoon and Middle Cedar Rivers to add perennial buffer strips at the edge of their fields to filter water before it enters these important source waters.

To measure our progress, the State of Iowa invests \$3 million annually to monitor water quality at 60 stream sites and 185 lake sites. This monitoring tests for P and N levels, including 18 official sites that monitor the statewide nutrient load year-over-year. Iowa DNR takes water samples every month, all year long, and assesses water quality based on more comprehensive testing criteria than nitrates alone. This is also the data used to benchmark statewide nutrient load reductions and evaluate long-term trends since the INRS was implemented in 2013. This data is publicly available on the Iowa DNR's AQuIA website and can help guide short-term management and long-term investment decisions.

Every Iowan has a role in improving water quality. Rural water utilities, farmers, community leaders, landowners, businesses and residents are all part of the solution. By working together, coordinating investments, and supporting both conservation and infrastructure upgrades, we can improve Iowa's water quality and continue delivering safe drinking water to every community in our state.

Thank you for your continued partnership. Happy New Year!



A handwritten signature of Mike Naig in black ink.

Mike Naig,
Iowa Secretary
of Agriculture





Achieving Nutrient Reduction and NPDES Compliance Through Flood-Resilient Wastewater Improvements

Evansdale, Iowa Wastewater Treatment Plant Rehabilitation

The City of Evansdale, Iowa, has long recognized the crucial role its wastewater treatment facility plays in protecting public health and the environment. Yet despite decades of reliable service, the facility found itself increasingly vulnerable to two significant challenges: recurring flood damage and newly strengthened environmental regulations. In collaboration with their engineering consultant McClure, Evansdale transformed those challenges into an opportunity to modernize aging infrastructure, protect vital community assets, and most importantly, achieve compliance with new National Pollutant Discharge Elimination System (NPDES) permit requirements focused on nutrient reduction.

A History of Flooding and Infrastructure Strain

Evansdale's wastewater treatment plant sits outside the protection of the city's levee system, directly in the Cedar River floodway. While this location once offered operational convenience, the facility has endured extreme flooding events, particularly in 2008 and 2016. Both events left the plant significantly damaged and required costly repairs simply to restore basic functionality. These setbacks underscored the vulnerability of wastewater infrastructure located in flood-prone areas and the urgent need for a more resilient path forward.

Following the restoration of operations after the 2016 Cedar River flood, the facility faced a new and more complex challenge: updated NPDES permit limits that required tighter control of nutrient discharges. The Iowa Nutrient Reduction Strategy called for meaningful reductions in both Total Nitrogen and Total Phosphorous. Meeting these goals would require process enhancements far beyond routine maintenance or minor upgrades.



New headworks building construction



The plant also lacked a disinfection system, a requirement for ensuring public health protection downstream. With regulatory compliance deadlines approaching and flood vulnerability still fresh in community memory, Evansdale needed a comprehensive, cost-effective plan.

Regulatory Compliance Drives a New Vision

To chart that path, Evansdale and their contract operator, PeopleService, partnered with McClure to develop a long-term Facility Plan that would satisfy the city's new NPDES permit conditions, including nutrient reduction, and address the plant's exposure to flooding. Importantly, the City evaluated whether to construct an entirely new facility at a safer location or reinvest in the existing infrastructure. Plant relocation would have provided flood risk avoidance, but at a higher capital cost. Instead, the selected alternative pursued a targeted rehabilitation approach that strengthened the existing facility, protected against future flood events, and met all new regulatory requirements.

The resulting project became a progressive example of balancing environmental compliance, financial responsibility, and resilience.

A Modernized Facility with Advanced Treatment Capabilities

Bid in February 2023 and awarded to Woodruff Construction, the \$8.5M rehabilitation effort delivered improvements across all major treatment components. Among the most essential additions were a new headworks building, with mechanical screening and grit removal, and a new ultraviolet (UV) disinfection system, designed to reliably meet disinfection standards even during elevated river levels.

Because the facility's hydraulic profile was designed prior to flood elevation increases which occurred following the 2008 and 2016 events, an effluent pumping station was incorporated to ensure continuous discharge under high-water conditions. This combination ensures that Evansdale can provide safe, disinfected effluent during all seasons, safeguarding downstream water users.

To meet the requirements of the Iowa Nutrient Reduction Strategy, McClure designed a new anaerobic/anoxic selector tank with internal recycle pumping, key elements of biological nutrient removal (BNR) technology. Combined with enhancements to the sludge pumping system, these process changes provide the microorganisms within the treatment process with proper biological conditions to decrease nitrogen and phosphorus in the treated water before discharge. After treatment optimization was completed by PeopleService in 2024, the plant routinely produces high-quality effluent. Over the last 12 months, effluent total nitrogen has averaged less than 8 mg/L and effluent total phosphorous has average around 0.5 mg/L without supplemental chemical addition, exceeding the goals of the Iowa Nutrient Reduction Strategy.

The City's investment directly reduces nutrient loading to the Cedar River and helps Evansdale achieve long-term NPDES permit compliance. The targeted improvements to the existing aeration and biological treatment infrastructure extended the useful life of vital assets already in place. Rather than starting from scratch, Evansdale's approach maximized value from prior investments.

Protecting Critical Infrastructure from Future Floods

Given the facility's location, every improvement needed to incorporate resilience. The addition of a new flood protection levee surrounding all treatment infrastructure required extensive regulatory permitting efforts. The supplemental flood protection levee ensures all critical treatment processes are better shielded from future flooding along the Cedar River, protecting both the City's investment and the environment by minimizing downtime and preventing untreated sewage releases during extreme weather events.

Environmental and Community Benefits

The completed rehabilitation aligns local infrastructure needs with broader environmental protection goals:

- Significant decreases in nitrogen and phosphorus discharged into the Cedar River
- Improved protection of public health through reliable disinfection
- Extended lifespan of existing assets reducing future the capital burden on residents
- Increased operational resiliency and protection from flood events

These improvements demonstrate the City's commitment to responsible stewardship of the Cedar River and its watershed. As part of the wider Iowa Nutrient Reduction Strategy, Evansdale's upgraded treatment process contributes to statewide, and ultimately regional efforts to improve water quality from Iowa to the Gulf of Mexico.

A Value-Driven Solution That Looks Forward

By rehabilitating rather than replacing its facility, the City significantly reduced capital expenditures while achieving every goal set forth by regulators and the community. The project's holistic approach integrating nutrient reduction, disinfection compliance, and flood resilience reflects thoughtful planning and a strong partnership between Evansdale and McClure, while preserving financial stability for the City into the future.

As water quality standards continue to evolve, the City of Evansdale is well-positioned to meet its responsibilities to both residents and the Cedar River. The community can take pride in a facility that not only overcomes past flooding hardships, but also proactively advances a cleaner, healthier, and more resilient future.

For questions, please contact:

Alex Potter, PE, McClure

515.964.1229

apotter@mcclurevision.com

DeAnne Kobliska, Mayor

319.232.6683

mayor@cityofevansdale.org



Presorted
Standard
U.S. Postage
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Rathbun Regional Water Association, Inc.
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Centerville, IA 52544
1-800-233-8849
www.rrwa.net

WATER MATTERS

Did you know that the water that comes out of the faucet for many Iowans started out below the earth's surface? 'Groundwater' is the term used for this water that is found in porous rock or sediment. The unit of sand, gravel, or bedrock that holds this groundwater is called an aquifer — but where does this groundwater originate — and how does it reach our faucet?

What is an Aquifer, and How Does Water Get There?

An aquifer is an area beneath the earth's surface where pore spaces between sand, gravel, or bedrock become saturated with water over time. An effective aquifer is both permeable and porous. Permeability refers to the ability of water to move through the aquifer. Porosity refers to the amount of open spaces in the rock that allow for storage of groundwater. In Iowa, drinking water comes from bedrock aquifers—often made of sandstone or fractured limestone, as well as "alluvial" aquifers—made of sand and gravel near rivers and streams. Most aquifers recharge from rain, runoff, melting snow, or other sources of water above ground. The deeper the aquifer and the less permeable the material or rock above the aquifer, the longer it usually takes to recharge. A layer of impermeable material above an aquifer is called a "confining layer." Confining layers are often a good thing as they protect groundwater from contaminants. However, they typically make the recharge of the aquifer a bit trickier.

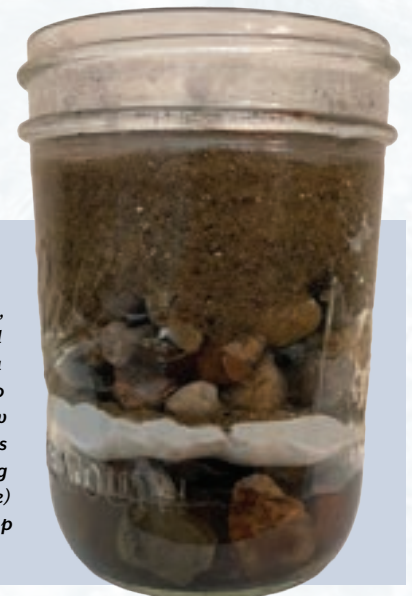


Groundwater model showing a cross-sectional view of different layers of rock, wells, confining layers, and how they interact.

How Does Water get From the Ground to our faucet?

To extract water from aquifers, holes are drilled from the earth's surface down to the aquifer. A pump is then installed in this hole, which allows water to be pumped from deep underground to the surface. This hole in the ground with a pump is referred to as a well. Wells range in diameter from a few inches, to over two feet. Alluvial wells are often less than 100 feet deep, but deep bedrock wells can reach over 2000 feet in depth in parts of Iowa.

For an aquifer to continue to be a sustainable source of water for the long term, the aquifer must recharge at a rate equal to (or faster than) the rate at which water is pumped from the well.



Make your own aquifer at home! Fill a jar with rocks and sand to simulate an aquifer, but insert a layer of clay to seal off some of the material. As you slowly fill the jar with water to simulate recharge, notice how the upper area quickly becomes saturated, but the confining material (white clay in this case) causes the layer below it to fill up with water much more slowly.