

JANUARY 2021 | Rathbun Regional Water Association

QUENCH

news by the glassful

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*Water Utilities Are Reliable
Even During a Power Outage*



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on the cover

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Publisher Iowa Rural Water Association

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The IRWA Mission: To provide the highest leadership in the support of Iowa's water and wastewater industries through the provision of technical assistance, training and education, legislative, regulatory and public affairs, and financing activities.

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NOTICE OF ANNUAL MEETING

January 2021

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 25, 2021 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 2020. 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 2020 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 2020 are: Charla Warner and Garry Schiller.

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

District 5: Charla Warner – PO Box 37 – Bonaparte, IA 52620

District 6: Garry Schiller – 1798 255th Street – Donnellson, IA 52625

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, Chairman
- Denny Amoss, Vice Chairman
- Doug Goblen, Secretary & Treas.
- Curt Frank
- Garry Schiller
- Charla Warner
- Ken Wuthrich

BIOGRAPHY OF NOMINEES

District 5

Charla Warner lives near Bonaparte. She has 3 grown children, 5 grandsons, 1 great grandson and looking forward to a great granddaughter. She is very active in the community, currently President of Township Stores, Inc. which is the local grocery store in Bonaparte. Charla is also actively involved in the daily operations of the store. She is also President of the Bonaparte Cemetery and the treasurer of the Bonaparte Historical Association.

District 6

Garry Schiller, and his late wife Teresa have been lifelong residents of Lee County and joined RRWA in 1988 when the first phase of the Lee County system was built and he became a Board of Director in 2010. Garry and his brother farm approximately 600 acres mostly south of Donnellson, raising corn, soybeans, and wheat. The Schiller's have two grown children and enjoy four grandchildren. Garry served as a member of the Central Lee Community School Board for seven years, between 1974 and 1981. He served on the Farm Service Corp. board of directors for nine years, the Lee County FSA County Committee for nine years, and has also served for three years on the board of the United Church of Christ in Donnellson.

RRWA Explores the Uses of Drone Technology

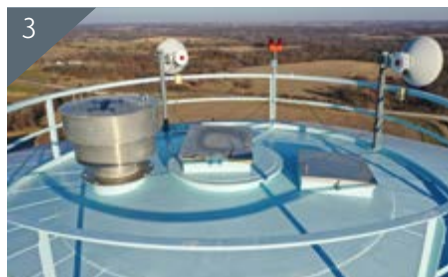
Drones, or unmanned aerial vehicles in technical jargon, have become commonplace in recent years. Individuals, businesses, and governments are developing a myriad of applications for which these remote-controlled and programmable flying devices are particularly well suited. Aerial photography, light shows, shipping, inventory control, mapping, facility inspections, crop management, search and rescue efforts, and law enforcement surveillance are just a sampling of the many current uses of drones.

In 2020, RRWA decided that the potential applications and benefits of a drone to the utility's operations justified an investment in this technology. Among the likely uses identified by RRWA were the inspection of water towers including pre- and post-painting evaluations as well as monitoring attached equipment, identification of water main routes for distribution system expansion and improvements, data collection for facilities operation and management, wastewater lagoon inspection, possible water main leak identification in remote areas, and aerial photography of conservation practices to support efforts to protect the utility's source of water, Rathbun Lake.

RRWA's current drone is a DJI Mavic 2 Pro. The drone weighs 2 pounds and has a flight time of about 75 minutes with 3 batteries. It has a 20mp camera for still photos and the ability to shoot 4K video. For RRWA, one of the biggest selling points of this drone is its compact size. Folded, it is only 8.5"x3.6"x3.3" and unfolded, it measures 12.6"x9.5"x3.3". The drone and accessories including a controller, charger, and extra batteries all fit in a case that 9"x7"x5" which stows easily in a truck without taking up a lot of space. Another great feature of this drone is its omnidirectional obstacle sensing system. This system prevents the drone from flying into objects that the pilot might not notice. RRWA's drone and accessories cost \$2,300.



Tyler Havard, RRWA's Support Services Technician, is the utility's drone expert and pilot. Tyler obtained his Remote Pilot License which is required to operate the drone for commercial uses. Tyler prepared for the licensing exam using online videos, study guides, and practice tests. Indian Hills Community College in Ottumwa administers the exam which costs \$150. The license is valid for 2 years before the need to retest and renew. The requirements in FAA Part 107 govern commercial use of drones in Iowa. Currently, drones can only be flown to an altitude of 400' under most circumstances and the pilot must maintain visual sight of the drone at all times. Please contact Tyler at 1-800-233-8849 with any questions about RRWA's use of drone technology.



1. RRWA's drone, controller, and case 2a-b. Drone photos of tank inspection pre- and post- painting
3. Drone photo of damaged hatch identified during tank inspection 4. Drone photo of newly painted tower and logo

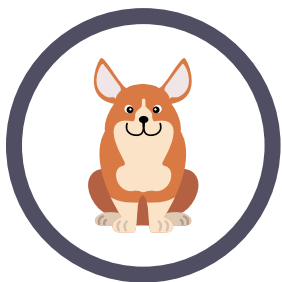
Everyone Lives in a Watershed

What is a Watershed? An area of land that drains to a common water body. Your actions, habits and decisions have an effect on our watershed and the animals and plants that share life with us.

What can you do to protect our watershed?

CAR REPAIR

According to the US Bureau of Transportation, there are over 263 million registered passenger vehicles on the road. That's a lot of opportunity for an oil and/or antifreeze leak to happen on your driveway. Those leaks can then run off your cement and enter the watershed through the storm drains which then pollutes water sources. Check your vehicle health often so you are able to catch leaks and get them repaired quickly.



PICK UP AFTER YOUR PET

The American Pet Products Association (APPA) reports that in 2016 68 percent of U.S. households owned some sort of pet. And you know what that means...a lot of Poop! Looks, size and diet don't matter – pets can pollute if you don't pick up after them. If your pet defecates in your backyard, chances are it will quickly enter the watershed. Waste components like fecal bacteria and nutrients are washed into storm drains, streams, and other receiving waters by irrigation, rain, melting snow and flooding. They can also simply leach through the soil and into the groundwater. Clean up after your pets daily to prevent pet pollution.

STORM DRAIN/RAIN DRAIN

Your storm drain is not a means for you to dispose of grass clippings, leaves and other trash. These wastes should be swept up and collected, not pushed or poured down the nearest storm drain. You'll save water and keep harmful pollutants from shedding into the drains by disposing of yard waste properly. If it's not rainwater, it doesn't belong in the storm drain.



CLEAN WATER STARTS WITH YOU

When it rains, whatever doesn't soak into the ground runs off roofs and yards, down streets, into storm drains and then directly into rivers, lakes, creeks, and other local water bodies. If that runoff is polluted, it's most likely that our own actions caused the problem, and we are contaminating our water. If you don't want to drink it, swim in it, or fish in it, don't put it in the water. Remember: Not Rain? No Drain!

Answers to Your Questions about RRWA's Smart Meters

Call RRWA at 1-800-233-8849 to Learn More and to Request Your Smart Meter!



Close to 3,000 RRWA customers now enjoy the benefits of having a smart water meter for their home, farm, or business. Each day, interested customers contact RRWA to learn more about smart meters. Here are answers to our customer's most commonly asked questions about RRWA's smart meters.

DO I HAVE TO PAY RRWA TO INSTALL A SMART METER?

No. RRWA will replace an existing water meter with a smart meter for our customers at no cost.

WILL I PAY AN ADDITIONAL MONTHLY FEE TO HAVE A SMART METER?

No. Customers do not pay any additional charges or monthly fees to have a smart meter.

HOW DO I FIND MY WATER METER READING WITH A SMART METER?

Customers simply log in to their online smart meter account on a secure website to find their water meter reading.

WILL ALL OF MY SMART METERS BE IN ONE ACCOUNT ON THE WEBSITE?

Customers with more than one smart meter can easily access all of their meters that are of the same type (Metron or Badger) in one online account on the secure website.

CAN I USE MY SMARTPHONE TO LOG IN TO MY SMART METER ACCOUNT?

Yes. Customers can use a smartphone, tablet, or computer to log in to their online smart meter account.

IS IT DIFFICULT TO SET UP MY ONLINE SMART METER ACCOUNT?

Not at all. RRWA provides customers with easy to follow instructions to set up their online smart meter account by email and on our website at www.rrwa.net.

The smart meter has made life easier for me with auto-pay for my busy schedule and leak protection to prevent costly water bills.

— Travis Selix, RRWA Customer

After I got a smart meter, it found a small "trickle" leak in the house. If I had gotten a smart meter sooner, it would have saved me money from a much larger hydrant leak.

— Burton Prunty, RRWA Customer

WHAT IF I NEED HELP WITH MY SMART METER ACCOUNT?

Call RRWA at 1-800-233-8849. RRWA's customer service representatives will be glad to help you. Customers can also find information on RRWA's website at www.rrwa.net.

WHAT IS AUTO-PAY? HOW DOES AUTO-PAY WORK?

Auto-pay is a bill payment option available to customers with smart meters. For customers who sign up for auto-pay, RRWA uses their smart meter reading to automatically bill them each month. Customers can pay their water bill from a bank account or with a credit card. RRWA notifies customers by email of the amount of their monthly water bill several days before charging their bank account or credit card.

IF I SIGN UP FOR AUTO-PAY, WILL MY PERSONAL INFORMATION BE SAFE?

Yes. RRWA has taken the necessary steps to ensure that our customers' personal financial information is protected.

DO I HAVE TO SIGN UP FOR AUTO-PAY IF I HAVE A SMART METER?

No. Customers are not required to sign up for auto-pay if they have a smart meter.

IF I HAVE A SMART METER BUT DON'T SIGN UP FOR AUTO-PAY, HOW DO I PAY MY WATER BILL?

Customers who have a smart meter but do not sign up for auto-pay can pay their water bill using RRWA's e-pay system, by mail, in person, or by phone. These bill payment options are described on RRWA's website at www.rrwa.net.

CAN A SMART METER REALLY DETECT IF I HAVE A WATER LEAK?

Yes. Smart meters can detect if water is flowing through your meter at times and at rates that are not normal or expected.

HOW WILL THE SMART METER LET ME KNOW THAT I HAVE A WATER LEAK?

Customers will be notified of a water leak by email or by text message depending on their type of smart meter (Metron or Badger).

DO I HAVE TO PAY A MINIMUM MONTHLY WATER BILL YEAR-ROUND WITH A SMART METER?

Yes. RRWA customers who have a smart meter pay for their actual water usage each month. Customers with a smart meter have to pay a minimum bill for any month that they do not use water or use 2,000 gallons or less. However, RRWA will not charge customers a fee to turn off and turn on a smart meter for seasonal use.

SO, WHY SHOULD I REQUEST A SMART METER?

Most RRWA customers who request a smart meter sign up for auto-pay so they no longer have to read their remotes, mail in their payments, or worry about paying their water bills on time. In addition, water leak notification is a very important benefit of smart meters for many RRWA customers.

AFTER I REQUEST ONE, HOW LONG WILL IT TAKE TO INSTALL MY SMART METER?

RRWA has two crews that install smart meters daily. The crews work to install smart meters for customers as soon as possible after their request is received by RRWA. Call now so we can install your smart meter.

HOW DO I REQUEST A SMART METER?

Call RRWA at 1-800-233-8849 to request your smart meter.



RRWA employee installs smart meter antenna



RRWA smart meter ready to be installed

WATER UTILITIES ARE RELIABLE *Even During a Power Outage*

By Greg Huff, Iowa Rural Water Association Chief Executive Officer

On August 10, 2020 millions of people in the Midwest woke up to what they thought was going to be another beautiful summer day. By that evening, many of those in the path of an unexpected derecho were dealing with substantial property and crop damage. The storm, which originated in South Dakota and lasted 14 hours, swept across the Midwest through Nebraska, Iowa, Illinois, Wisconsin and Indiana. Four other states were somewhat less affected. In all, the storm track was 770 miles long with 126 mile per hour peak wind gusts, spawning 25 tornados. By far, Iowa was the hardest hit state of all – sustaining a large portion of the estimated \$7.5 billion in total damages.

In addition to the property damage, as many as 1.9 million customers lost power in the days to follow. It is estimated that 585,000 customers in Iowa were affected, some for nearly two weeks. Additionally, there were widespread outages for landline and cell phone service, and cable and internet utilities. If there was one bright spot in all of this, it is that the water kept flowing from the tap for rural water system and municipal water customers in spite of the widespread power outages.

You may wonder how your water utility can continue to provide safe, clean water when many of the other utilities are out of commission. It has to do with how a water utility is designed. Once raw water is obtained from its source, either from a surface water or groundwater source, it is then pumped to the utility's water plant to be treated before being pumped into the distribution system. As it is pushed into the system, the water fills the pipes, and the excess water fills the water towers in the system. The main function of the water towers is to pressurize the water for distribution.

This is often done during non-peak hours when water demand is low and the cost of electricity is also typically lower. As water fills the tower, which is often located on higher ground, it creates hydrostatic pressure. Hydrostatic pressure occurs when a large amount of elevated water pushes down on the water in the system and pressurizes the system. Thus, the system is "gravity fed" and provides a reliable, steady water pressure to customers throughout the distribution system, even when the pumps aren't running.

Most water towers can hold at least a one-day supply of water on average. Maintaining large quantities of elevated water plays an important role in regulating the water pressure, regardless of the fluctuation in water demand throughout the day. As the water is used, the supply and pressure begins to fall, and the system's pumps kick in to supply the system with more water as needed. With no power available this would be a major problem. Fortunately, nowadays most water utilities have backup generators to power the pumps when the normal supply of electricity is interrupted. While it is miserable to be without power and other utilities for an extended period of time, it would be much worse to be without water service as well. So, water outages, even during a major storm event, don't occur very often. This was the case during last summer's derecho.

Because the water systems in the derecho-affected area had quite a bit of water already stored in their elevated towers when the unexpected storm hit, the immediate, widespread electric outages didn't immediately affect the water pressure in the systems. Those systems that had backup generators in place switched over to backup generators as needed. Fortunately, Rathbun Regional Water Association, near Centerville, Iowa, was largely unaffected by the derecho. They were able to loan several backup generators to a system in central Iowa that needed them. Poweshiek Water Association, a regional water utility in east central Iowa that was in the main path of the storm, was able to continue to provide pressurized water to all of their customers in the aftermath of the storm. This was in spite of the fact that Poweshiek's Tama Water Plant sustained significant damage from the storm, including the loss of the plant's roof and communication tower.

Many water utilities in Iowa also belong to IOWARN – the Iowa Water/Wastewater Agency Response Network. IOWARN is a network of utilities helping other utilities to respond to and recover from emergencies. The purpose of IOWARN is to provide a method whereby water/wastewater utilities that have sustained or anticipate damages from natural or human-caused incidents can provide and receive emergency aid and assistance in the form of personnel, equipment, materials, and other associated services as necessary, from other water/wastewater utilities.

As you can see there are many resources and contingencies available to water utilities when disaster strikes. You can rest assured that the water professionals at your local system have carefully made plans to keep the water flowing 24/7.



Poweshiek Water Association's Tama Water Treatment Plant roof damage caused by the derecho

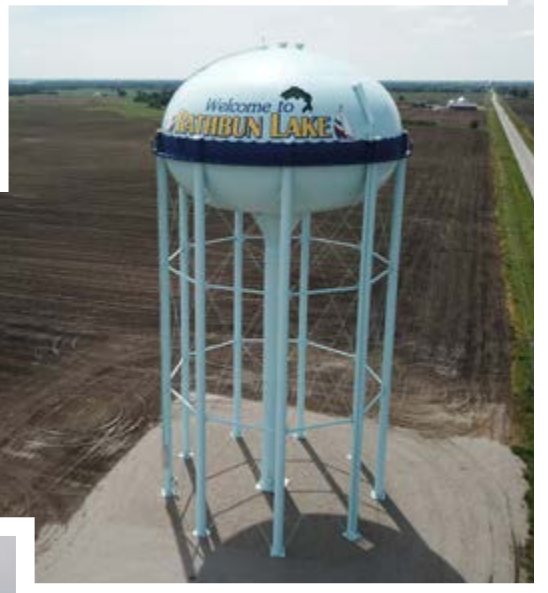
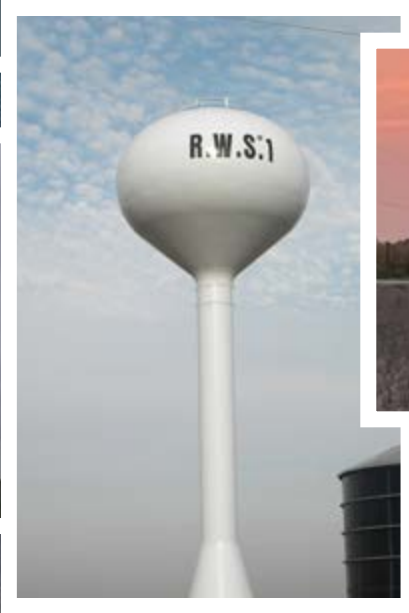
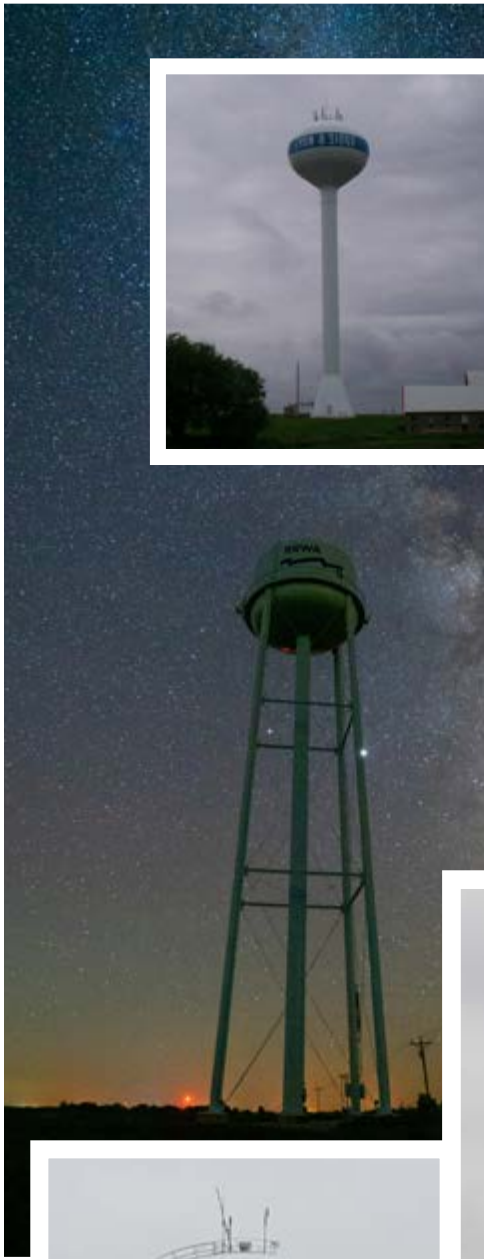




Photo by Matthew Doyle.

USDA Rural Development, Providing Clean Water and So Much More

by Matthew Doyle, USDA RD Iowa Public Affairs Officer

September 24, 2020, the groundbreaking for Iowa Lakes Regional Water's Reverse Osmosis Water Treatment Plant took place. The project received funding through the USDA Rural Development and is also utilizing interim financing through CoBank. Bette Brand, USDA Deputy Under Secretary for Rural Development, Grant Menke, USDA Rural Development Iowa State Director, and other USDA RD staff attended the event.

USDA Iowa Rural Development generally plays a significant role in rural Iowa's water infrastructure, and 2020 was no different. We invested \$124.9 million to expand access to safe drinking water and improve wastewater management systems across the state. These investments will enhance the reliability of the local water supply for 118,198 rural Iowans.

WEP provides funding for the construction of water and waste facilities in rural communities and is proud to be the only Federal program exclusively focused on rural water and waste infrastructure needs of rural communities with populations of 10,000 or less. WEP also provides funding to organizations that provide technical assistance and training to rural communities concerning their water and waste activities.

Within our Water and Environmental Programs (WEP), USDA Rural Development provides Water and Waste Disposal loan, grant and guarantee funding options, along with other lending opportunities listed here:

- Emergency Community Water Assistance Grants (ECWAG)
- Household Water Well Systems Grant
- Revolving Funds for Financing Water and Wastewater Projects (Revolving Fund Program)
- Special Evaluation Assistance for Rural Communities and Households (SEARCH)
- Solid Waste Management Grants
- Predevelopment Planning Grants (PPG)
- Technical Assistance and Training Grants

Our team is devoted to finding ways to support your rural community's needs.

USDA Rural Development offers more than just the critical water needs of communities. As much as we understand how vital it is for rural water infrastructure, we know that much more is needed to maintain and grow the rural communities where we operate.

USDA Rural Development has supported the expansion of rural broadband with our ReConnect Pilot Program and Telecom Infrastructure Programs, investing \$35.8 million, which provided 6,165 households, farms, and businesses high-speed internet. For our Community Facilities Programs, we invested \$92.7 million in loans and grants that funded the construction or modernization of 42 essential community facilities such as rural hospitals, educational institutions, and public safety facilities, benefiting 233,689 rural residents across Iowa. Housing Programs, a necessary piece to rural communities (after a sustainable water infrastructure has been established, of course), broke the ceiling in 2020. \$287.2 million went to investments in direct and guaranteed loans through the Single-Family Housing Programs, which helped 2,418 low- and moderate-income families buy homes throughout the Hawkeye State. We didn't stop there, investing \$33.3 million to assist rural businesses through our Business and Industry Loan Guarantee Program.

USDA Rural Development has done a lot to support rural Iowa's needs because we know when rural Iowa succeeds, all of Iowa follows. But even with a record-breaking year, we know there is still more to do, and we are here to do it!

USDA Rural Development has 11 offices across the state to serve the 1.7 million residents living in rural Iowa. Office locations include a state office in Des Moines and local offices in Albia, Atlantic, Humboldt, Indianola, Iowa Falls, Le Mars, Mount Pleasant, Storm Lake, Tipton, and Waverly. For more information, visit www.rd.usda.gov/ia, call (515) 284-4663, or follow us on Twitter @RD_Iowa



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Water Matters — Wellhead Protection

with Aaron Schroeder

The Iowa Department of Natural Resources (DNR) defines an abandoned well as “A water well which is no longer in use, or the well is in such a state of disrepair that continued use of the well for the purpose of accessing water is unsafe or impractical.” Though much progress has been made in recent decades, abandoned wells continue to pose a potential water quality hazard in Iowa. Among other risks, abandoned wells serve as a direct conduit for contaminated surface water to enter groundwater sources.

WHAT OPTIONS ARE AVAILABLE FOR MY UNUSED WELL?

There are three primary options available to manage wells that are no longer in use.

Well plugging typically involves removing the well’s pump and filling the well with clay or other material. The top 4 feet of the casing and any other structural or well operation materials are then removed. The well plugging process may vary depending on well size, well construction materials, and local geology.

Well rehabilitation involves renovating and rehabilitating well structures to improve the well’s reliability and water quality.

Placing a well in “standby” requires removing a well’s pump and capping the well to prevent possible contamination. If a well is placed in standby, it can be returned to operation at a later date.

IS THERE CURRENTLY ANY FINANCIAL ASSISTANCE AVAILABLE?

If you’re interested in closing a private well, cost share is available through the Grants-to-Counties (GTC) program. The GTC is funded by the Iowa Groundwater Protection Act and is administered by the Iowa Department of Public Health. The Iowa Department of Public Health works closely with Iowa DNR staff to ensure proper well testing, closure, and rehabilitation.

Funding available for the GTC program vary by county.

WHERE CAN I FIND MORE INFORMATION?

Additional information on well closing your wells can be found in the “Environmental Protection” section of the Iowa DNR’s website. Contact your county environmental health office for information on the availability of GTC funding.

A properly
abandoned
municipal
well in Fort
Atkinson, Iowa

