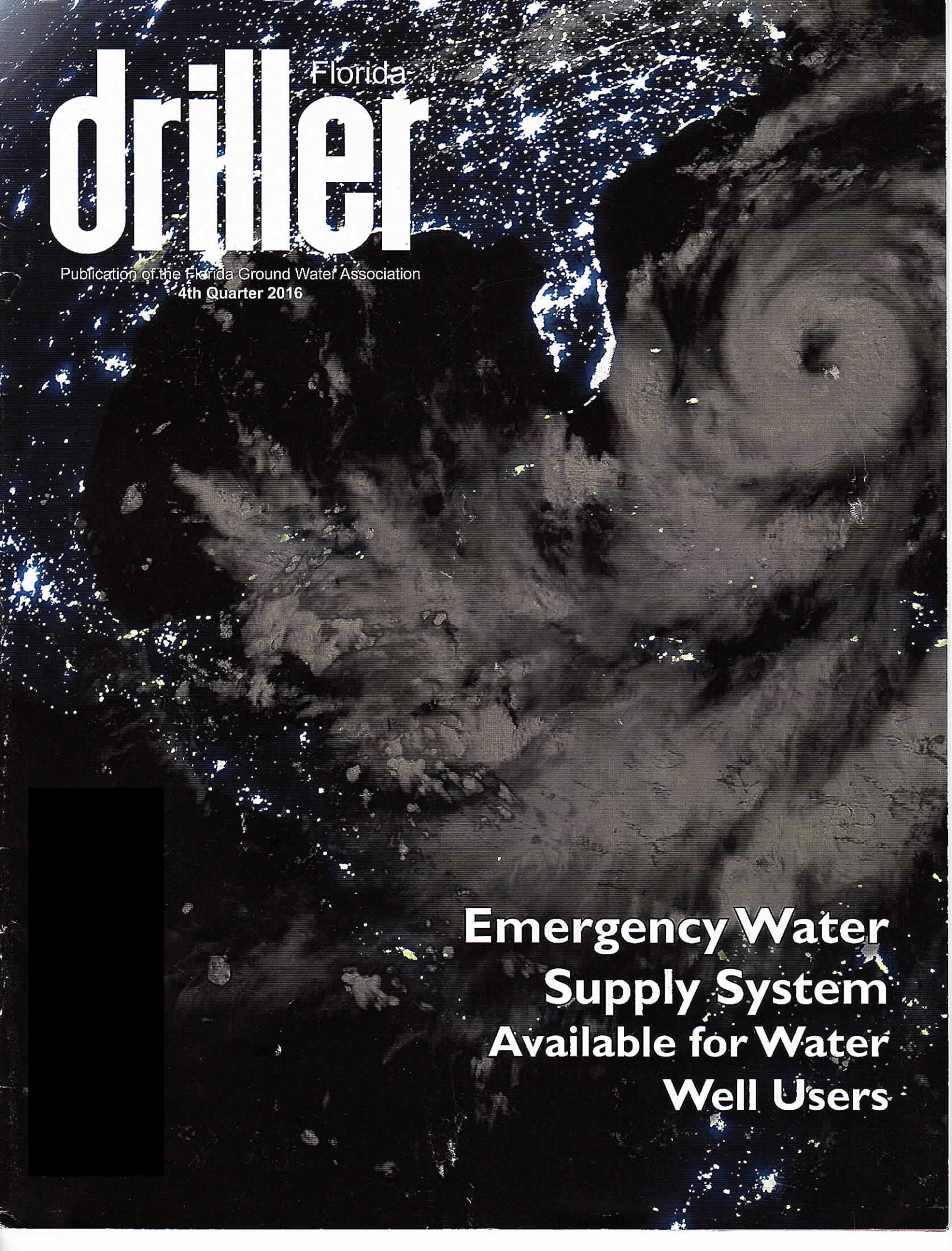

Florida driller

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Emergency Water Supply System Available for Water Well Users

FEATURE

Emergency Water Supply System Available for Water Well Users

New water system assures well users of fresh, pressurized water during storm-caused power outages.

Hurricane Matthew came through with a vengeance, and along it's path between Florida and southeastern Virginia, left almost over 2 million households without power. Were your customers prepared?

While the winds and the water passed relatively quickly, power outages lasted for days. For those on water wells, it means being without water—no power equals no water.

As a minimum, no water can be an inconvenience. At worst, it can be a serious health risk. Preparedness experts list food, lighting, and communications lower down the list of preparatory items, but at the top of EVERY list is water. Water isn't a luxury—It's a necessity.

Water for consumption is the most critical—we can live longer without food than without water. One gallon of potable water per person per day is the minimum guidance. But, is that enough? How long will the water last? For what else is water needed? Will your customers have water for basic sanitation needs like washing hands, flushing toilets, a periodic shower to wash off the storm grime?

Homes on water wells are particularly disadvantaged from power outages, but storms and flooding can also damage public water infrastructure, so preparedness is critical for homes on public water as well.

Also, an August 2015 Study published by Lawrence Berkley National Laboratory found a 10 percent increase in wind can increase the duration of a power outage by 75%. Is your customer's emergency water supply enough for a power outage almost twice as long as anticipated?

Generators—Previously the Only Option

Until recently, the only option for well users, besides storing adequate supplies of water, was installation of a generator. Available in both portable and fixed installation models, when properly sized and installed can provide a means of powering a range of devices in a home, including the well pump. But, generators are not without expense, limitations, and unknowns.

Generators can be very costly to install. While available at many "big-box stores", this only

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purchases the generator--It doesn't get a generator installed. Installation to code requires permits, certified electricians, wiring costs, connection to fuel source (if permanently installed). Portable systems also require fuel storage and may need attendance at the worst possible time in the storm.

Additionally, generators can be expensive to maintain and operate. Just like a car, a generator will require regular maintenance to assure its readiness when needed most. Period inspections and tuneups are expenses incurred whether the generator is used or not.

How much fuel is in fuel tank for the generator? The outage may last longer than anticipated ,and if the fuel tank was not recently filled, the generator may run out of fuel when most needed. A 20Kw generator will consume almost 5 gallons of propane per hour. In an 8 hour period, it can easily consume 40 gallons of propane. Most generator manufacturers list fuel consumption at 50% load.

And, no generator will provide water if the well pump fails or, if on public water, the water main breaks.

New System for Storm Preparedness Offers Customer Security and Industry Opportunities

Constant Water, a system recently introduced to the well drilling/plumbing markets, could be a lifesaver for so many on water wells or on an "at-risk" public water infrastructure. Constant Water is an automatic backup water supply activating with the loss of power to provide 40-120 gallons of pressurized water throughout the home or building. It also provides an assured emergency water supply for broken well pumps, failure of the public water supply, or for reduced generator usage. It makes a home "Storm Ready" and provides water security where generators can't.

Judson Walls, President of Virginia-based Constant Water, LLC, developed Constant Water to solve the problem of losing well water with a power outage or well pump failure. Walls, a retired Air Force officer, and his family bought their current home on a well system in 2005. During their first loss of power, they discovered the shortfall of a water well—No power equals no water. No water in the sinks, no showers, and one flush per toilet—Frustrating at a minimum, and a health risk in the worst case. "We can get along without a number of life's luxuries," says Walls, "but water isn't one of those luxuries.

Constant Water automatically activates in response to a power outage providing 40 gallons of pressurized water, and up to 120 gallons with additional tanks. Using a rechargeable, battery-powered control unit, the Constant Water system provides pressurized water to every sink, shower, tub and toilet in the home.

"Like so many, when expecting a rain or snow storm, we filled sinks and tubs with water, and bought bottled water for drinking and cooking. But, when the storm passed, we emptied the tubs and sinks," said Walls, "wasting a precious

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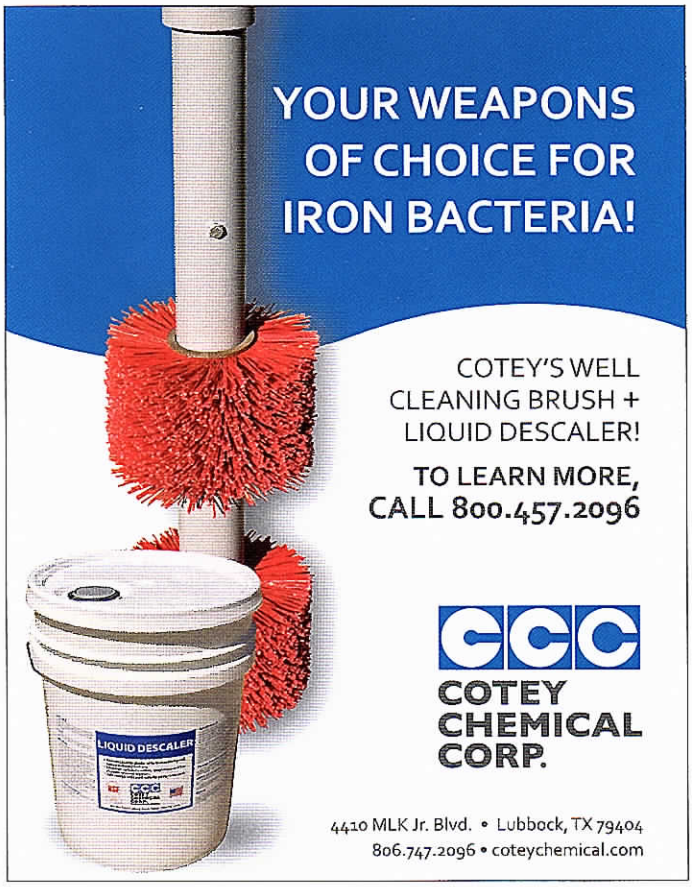
Are your customers prepared? A 10% increase in wind speed can almost double the duration of a power outage.



Features	Benefits
Automatic activation	Always ready for the next power outage
Pressurizes water to the entire home or building	No need to fill sinks and tubs, or buy bottled water
Manual Mode for well pump failure	Provides water while well pump is repaired
Small footprint	Easy installation in limited floorspace
Reduces dependence on generators	Water available even when the generator is not running. Conserves generator fuel.
Allows purchase of smaller generators	Provides water while less costly generator is used for lighting and refrigeration
Automatic battery recharging	No fuel tanks to refill
Automatic refill of tanks when power returns	Automatically prepared for the next water outage. No need to store water

Constant Water requires no generator, can reduce generator requirements, and conserves generator fuel.

resource. With Constant Water, your customers are always ready for the next storm and they don't waste water when the storm passes."

With Constant Water's in-line plumbing approach, the 40 gallon tanks are always full and the water is always fresh, so there's no need to fight store crowds to buy bottled water. It's also a "closed" system, so airborne contaminants cannot come in contact with the stored water.

A basic Constant Water system consists of a water storage tank and wall-mounted control unit, both designed to consume minimum space. Plumbed in-line to a home or building's existing water line, the system activates automatically upon the loss of electrical power, and provides pressurized water throughout the structure. When power is restored, Constant Water automatically resets, recharges, and refills—ready for the next outage.

Since 2005, Walls also experienced three well pump failures and designed the Constant Water system to handle that problem as well. Its "Manual Mode" activates the system to pressurize water during a well pump failure or, as he points out, loss of the community water supply—a growing problem with our aging public water infrastructure and the extremely dry conditions that stress water mains all over the country. Cyber attacks on our critical electrical and water infrastructures are also a recognized and growing threat.

Opportunities for Well Drilling Professionals

Constant Water presents the well drill community with important business opportunities:

- Expand revenue opportunities with new installations
- Provide follow-up opportunities with existing customers.
- Differentiate their company from the competition

First, it is a new and needed product that can be added at the initial installation of the well. "It solves a known problem experienced by every well owner. "Every well user is going to experience power failure and/or failure of the well pump. It's just a matter of time!!," says Walls. "Constant Water reduces the 'emergency' of both of these events."

Second, it gives the well driller an opportunity to call their previous customers and

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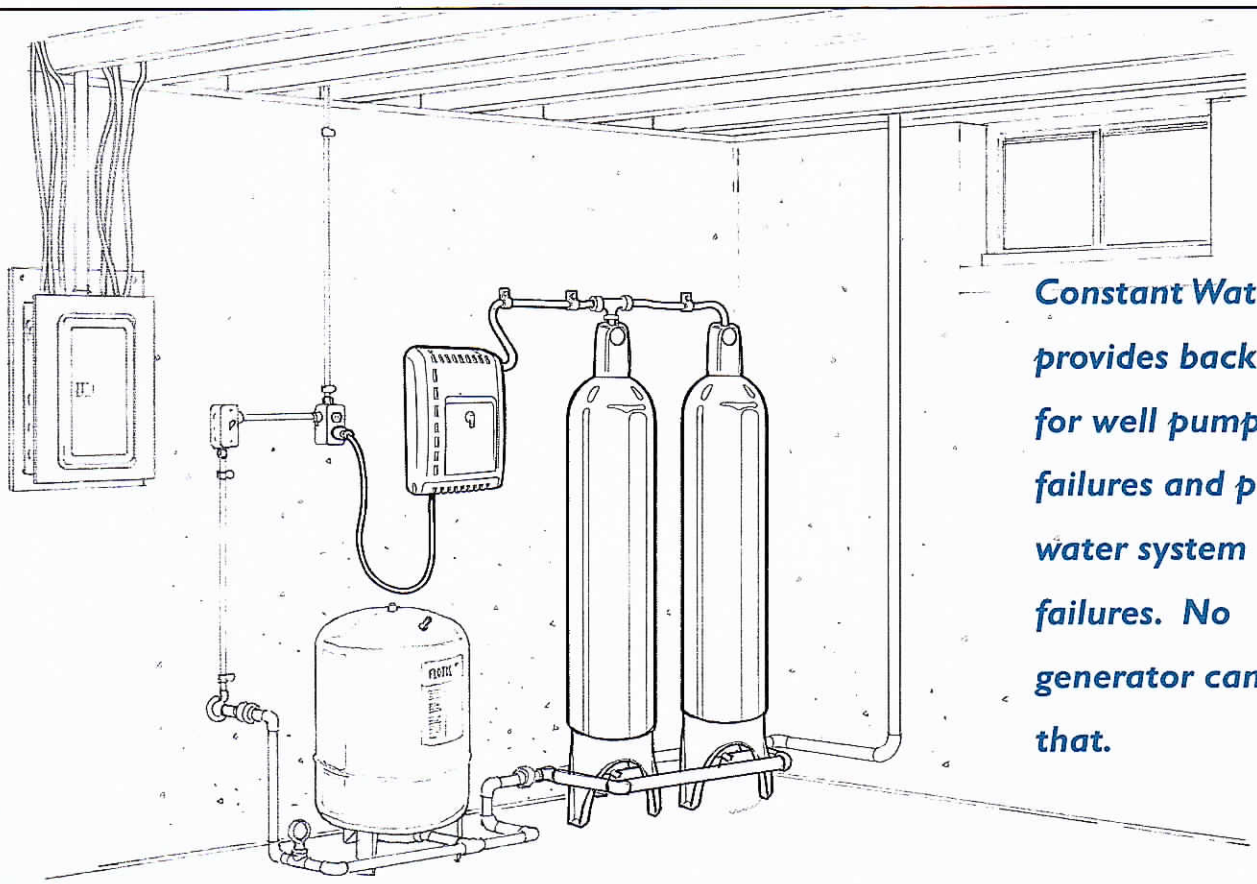

Constant Water provides backup for well pump failures and public water system failures. No generator can do that.

Constant Water provides 40-120 of assured emergency water supply. Your customers can always be "Storm Ready"

offer them a new product that solves a known problem. "Any time you have the chance to follow up with your existing customer base, you have an opportunity to meet a need and be recognized as a company that keeps up with important technology," says Walls. And, well users are typically clustered, so the opportunity for referrals is tremendous. "The first company to offer the new, value-added system to a community of well users is likely going to get the referral call from someone that heard about the system from their neighbor that bought one."

Lastly, it's an opportunity to differentiate your service from your competition. Explaining both the benefits and limitations of a water well to your customers builds, their trust in you. Providing a solution to the challenges they will experience demonstrates your concern for them beyond installing the well.

Larger capacity systems are being developed for commercial and healthcare facilities. "Large, complex, and expensive systems have been developed for commercial buildings and healthcare operations, but they were capital intensive and single points of failure." says Walls. "Installing multiple Constant Water systems in a large building reduces the risk of single-point failure and permits a prioritized phased deployment approach that reduces initial capital requirements."

Constant Water and International Aid Opportunities

Walls has also been contacted for discussions to support international aid efforts around the world. "We're confident Constant Water has a strong role in supporting the efforts of government and non-government organizations to expand the availability of potable water in disadvantaged countries. Integrating Constant Water in the planning stages can reduce the cost associated with "laying pipe" across long distances, and putting clean, pressurized water closer to the point of consumption," says Walls.

More information is available at www.constantwater.com, email to info@constantwater,com, or by calling Judson Walls at 540-347-3440.