

888-395-1033 wellcare® Hotline www.wellcarehotline.org Summer 2017 Volume 9, Issue 3

Dear Well Owners Network Member:

Summer is a great time to create wonderful memories outdoors, but that can change at any moment due to the weather. Hurricanes, tornadoes, flooding, drought, and other weather related occurrences can wreak havoc on your plans, but it can also do the same to your home and water well system. We have loaded this newsletter with information on all of these topics. So keep scrolling down!

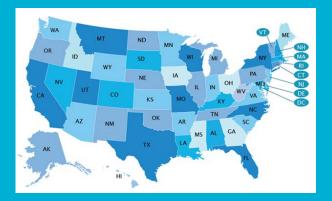
And as always, if you have questions regarding these topics, if you can't find what you're looking for, or if you have any other questions on wells and well water, the wellcare® Hotline can help! Contact the wellcare® Hotline at 888.395.1033 or www.wellcarehotline.org. We chat live now!

Don't forget to like us on <u>Facebook</u> and follow us on <u>Twitter</u> for extra tips, industry news, and more!

# **Emergencies & Disasters and Wells**

It is officially hurricane season and storms of all kinds can hit at anytime. <u>Prepare your home or business today with these easy steps!</u>

In the event of an emergency or natural disaster that threatens safe drinking water supplies, use our *interactive map* to access agencies within your state.



### **Preparing for Outages**

When the electric power supply is interrupted, so is the service provided by your well pump. You will need an alternate power source to supply your water. A gas or diesel-powered electricity generator can keep your well operating in an emergency. You could buy a small portable generator just to operate the submersible pump. Or, you could choose to install a full system generator to operate your well, in addition to refrigeration, heating, cooling, and other systems in your home.

Contact your well professional to help you decide what size generator you need and recommend a local dealer in portable and onsite generators.

#### **Storing Water**

A large storage tank can be added to your well system to supply water when the power fails. The tank is usually installed near your pressure tank. Water flows continually through the storage tank, so the water is fresh when needed. Simple gravity allows the storage tank to operate when the power is off. A typical storage tank is made of galvanized steel, carbon steel or fiberglass. It is fitted with a cap at the top to provide air, and a valve at the bottom to drain the water. The average family of four uses approximately 320-400 gallons of water each day for all indoor purposes. During an emergency, a family of four can manage on as little as 120 gallons per day, mainly to provide water for drinking and flushing toilets manually.

Contact your well professional for more information on installing a storage tank on your water system.

Ensure Safe Water

If you do not have an alternate water or power source in place to cope with power failures and a storm is fast approaching, try to store at least three gallons of fresh water for each member of your household. If you do not use these supplies, remember to replenish them every three to four months to keep the water fresh. When the power comes back on, let your tap water run for a few minutes to ensure the lines are clear and only fresh water is coming through the system. If the water shows any discoloration, odd odors or other signs of contamination, use an alternative source and have your water tested and treated before using it again.

#### **Lightning Protection**

Submersible pumps create a great grounding point for lightning energy because of their intimate contact with water. As a result, they are notoriously susceptible to lightning damage. Protecting pumps from lightning is a little different from protecting appliances within the home. In addition to surges coming down the utility lines, pumps are bombarded with heavy surges from a variety of directions. Therefore, a pump lightning-protection system usually consists of three layers. The first layer is at the service panel, and the second is at the pump controls. Lightning arrestors *(as seen on our well diagram)* protect the pump motor and controls from voltage surges caused by lightning, switching loads, and power line interference. For wells a great distance from the home, pump protection should also be placed at the wellhead, so the third (optional) layer is at the wellhead.

Contact your well professional to assist you with selecting the best option(s) for your well system.

For more information on Emergencies & Disasters and Wells view our information sheet on this topic.

# **Managing a Flooded Well**

If you live in an area susceptible to flooding or if your have experienced flooding recently, there are a few things you should know about your drinking water supply.



Important advisories that should be followed after a flood:

- Do not drink or wash with your well water. Your private well may be in danger of contamination from pollutants carried by flood water.
- Do not turn on the well pump. There is a danger of electrical shock and damage to your well or pump if they were flooded.

Contact your well professional for help in dealing with the impacts of the flood on your water quality and well system.

You should suspect water contamination any time your well casing becomes flooded; if your well is shallow and you are near areas that have been flooded; or if you notice taste, color or sediment changes in your water. Flood conditions can allow bacterial, viral, parasitic, or chemical contamination to enter the top of your well or seep down along your well's casing. Even if flood water did not rise over the top of your well casing, your neighbor's well may have been flooded, allowing contamination to migrate underground to your well.

If you suspect your drinking water is contaminated, find an alternative source for drinking, cooking and washing. You can get water from a neighbor's well you know is safe or from a community water supply, or you can purchase bottled water. If you can't find a convenient source of safe water, boil your well water before use. Boil the water vigorously for one minute. If you live in an altitude greater than one mile above sea level, increase boiling time to three minutes. For more information on boiling your water, see our wellcare® information sheet <u>What You Need to Know if You Are Told to Boil Your Drinking</u> Water.

Before you resume using your well, collect a water sample and have it tested for bacteria by a state certified laboratory. Contact your local or state health department for a list of state certified laboratories in your area, <u>find a list of certified laboratories on our website</u>, or contact the wellcare® Hotline for assistance.

Continue reading about Managing a Flooded Well.

### Heads Up! New Well Water Testing Service



SimpleWater is a team of water engineers, health experts, and designers working towards the most informative water testing service ever offered, it's called <u>Tap Score</u>. Tap Score provides the latest in home water testing, including certified laboratory testing, personal water health analysis, and even unbiased, optimized treatment matching. It's designed for busy people who want to quickly and efficiently understand their water as well as solve their issues with the help of treatment professionals by phone and email. Tap Score is launching this month and promoting their service for as low as \$90 with online code TREAT+YOUR+WATER+WELL, exclusively for wellcare® Well Owners Network members <u>until June 30, 2017</u>. Order test kits at <u>mytapscore.com</u>.

## **Drought and Your Well**

The water level in the aquifer that supplies a well does not always remain the same. Droughts, seasonal variations in rainfall, and pumping affect the height of the groundwater levels. If wells in the area are pumped at a faster rate than



the aquifer around it is recharged by precipitation or other underground flow, then water levels in the well can be lowered. This can happen during drought due to the extreme scarcity of rain.

Your well will need several slow, soaking rains for the water to filter through the

ground and replenish the supply. Shallow wells may see water levels rise more quickly with a return of rain. Deeper wells tend to withstand a drought with no

problems. But if your well is affected, it can take several months of adequate rain or snow to restore the supply.

During periods of drought, there are some things you can do to manage water levels and help prevent your well from going dry. <u>*Read to find out more.</u>*</u>

Each person uses about 80-100 gallons of water per day! The largest use of household water is to flush the toilet.

Find out how much your household uses and learn how to conserve even more with the Household Water Audit

# Now Available for Free Download! Caring for a Cistern

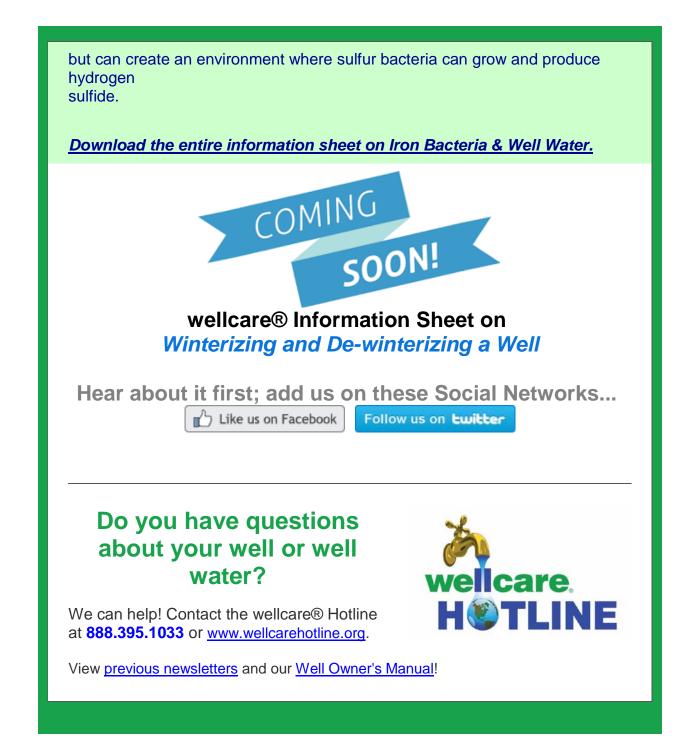
**Click to Read** 

## Iron Bacteria & Well Water

Iron bacteria are small living organisms that naturally occur in soil, surface and groundwater. These nuisance bacteria combine iron or manganese with oxygen to form deposits of "rust," bacterial cells, and slimy materials that stick to well casings, pumps, pipes, plumbing fixtures, and water appliances often damaging them.

Iron bacteria can be orange, brown, or red in color. Sometimes it floats in the water like orange algae and sometimes you may notice an orange slime that coats the inside the toilet tank that can be wiped off with a finger. You may also notice an oily sheen on the water surface.

Iron bacteria often produce unpleasant tastes and odors commonly reported as: "swampy," "oily," "cucumber," "sewage," "rotten vegetation," or "musty." The taste or odor may be more noticeable if the water is stagnant for some time. Iron bacteria does not produce hydrogen sulfide, the "rotten egg" smell,



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