

wellcare[®] information for you about Wells: What to Do When the Power Fails

Millions of Americans in the Northeast and Midwest lost power in August 2003 when their regional electrical grids broke down. A few weeks later, nearly a half-million residents in the Washington-Maryland-Virginia area lost power due to severe summer thunderstorms.

Each household was forced to cope without water for drinking or other purposes, many of them for several days. Are you prepared for a sudden power outage and its impacts on your well and home water system?

When the electric power supply is interrupted, so is the service provided by your well pump. You will need an alternate source to supply your water.

Water Storage or Retention Tanks

A bulk storage or water retention tank can be added to your well system to supply water when the power fails. The tank is usually installed next to your pneumatic water storage tank, which operates on electricity. Water flows continually through the bulk 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 requires 275 gallons of water each day for all purposes, from drinking to washing clothes and preparing meals. 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.

Installation of a typical 120-gallon storage tank costs about \$500, including fittings and labor. Contact your well professional or purchase a tank from a well drilling supply store. Multiple tanks may be added to increase capacity.

Alternative Power Sources

A gas or diesel-powered electricity generator can keep your well operating in an emergency. You could buy a small portable generator, at an average cost of less than \$1,000, just to operate the submersible pump on your water tank. 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.

To determine what size generator you might need, go to the website, www.phaseconverter.com/selectionform.html, which features a list of the wattage requirements to operate household appliances and systems. For example, the submersible pump in a well system typically requires a generator with a minimum capacity of 3,500 watts. Remember, the larger the water pump, the larger the generator's wattage must be.

A professional well contractor or pump supplier can also help you decide what size generator you need and recommend a local dealer in portable and on-site generators.

Take Simple Precautions

If you don't yet have an alternate water or power source in place to cope with power failures, make advance plans to ensure a safe drinking water supply. Try to store at least four gallons of fresh water for each member of your household. Remember to replenish these supplies 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. Floods that lead to power loss can contaminate your well.

For more information on your drinking water

The following sites provide up-to-date information on efforts to protect public water supplies and steps you can take as a private well owner:

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| Home*A*Syst Program | www.uwex.edu/homeasyst |
| Water Quality Association | www.wqa.org |
| The Groundwater Foundation | www.groundwater.org |
| American Water Works Association | www.awwa.org |
| wellcare® Hotline for Well Owners | 888-395-1033 |

For more information about wells and other wellcare® publications

wellcare® is a program of the **Water Systems Council (WSC)**. WSC is a national nonprofit organization dedicated to promote the wider use of wells as modern and affordable safe drinking water systems and to protect ground water resources nationwide.

Well owners and others with questions about wells or well water can now call the new wellcare® hotline at 888-395-1033 or visit www.watersystemscouncil.org



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