

wellcare[®] information for you about **What to Do If the Well Runs Dry**

Your well system works by inserting a pump inside a drilled hole to bring water up and into the house through a pipe. If there is no ground water available to enter the pump, it sucks air instead of water. When the tap is turned on, nothing comes out. In most cases, this is caused by the underground water table dropping below the level of the well pump.

Signs of Trouble

Look for signs that your well is under stress. Tap water may look muddy or murky or the taste might change. Spigots might cough and sputter as air comes through the line instead of water. The submersible pump may be pumping nothing but air. All are signs of dangerously low water levels.

There could also be a simple solution. Perhaps the household electricity is off or a fuse has blown, cutting power to the pumps and pressure tanks needed to operate your well. The pump, pressure tank or wiring to the pump might also fail.

The only sure way to tell if the well has run dry is to measure the water level in the well. This can be a complicated task. Contact your well driller and review the [wellcare[®]](#) information sheet *Coping with Low Water Levels*.

Options to Replacing Your Well

Once you are sure the well is out of water, review your options with your well professional.

First, check if the well is reaching the end of its lifespan. The life of a well is estimated at 20 to 30 years, or longer, depending on the quality of materials used during construction. However, over time the yield of the well may decline, due to sediment or mineral scale build up inside the well. If so, your well may just need to be cleaned or treated to restore it to its former condition.

Perhaps the well's pump can be lowered to reach the lower water table. If there is room, the pump can be placed deeper into the well's borehole.

Deepening the well itself, so that it reaches further below the water table, may help to insure a more drought-resistant water supply. However, deepening a well is never a guarantee that you will get more water and it can be as expensive as drilling a new deep well.

Redeveloping an existing well may make it more efficient. Hydrofracturing, a technique that uses high-pressure water to open fractures in surrounding rock and thereby increase water flow, may improve your water supply.

One option not to employ is to hire a tanker truck to pour water into your well. This could damage the well's borehole and pump and contaminate your drinking water.

Finally, remember to test your well water after any maintenance, deepening or other procedure.

Replacing Your Well

A new, deep and modern well may be the only option to ensure a safe and steady water supply after your current well runs dry. This is an opportunity to work with your well driller to address the well location on your property, its size and storage capacity, water pressure and other issues.

After the new well is installed, your old well must be sealed to protect the purity of your ground water supply and prevent any hazard. Review the [wellcare®](#) information sheet *Closing an Abandoned Well*.

For more information on what to do if the well runs dry

Measuring Well Levels, W.L. Trimmer, Oregon State University Extension Service, call 800-561-6719 or go to <http://eesc.orst.edu/agcomwebfile/EdMat/html/EC/EC1368/EC1368.html>

Understanding Your Drinking Water Well, Pennsylvania Department of Environmental Quality: www.dep.state.pa.us/dep/subject/hotopics/drought/facts/FS2780.htm

[wellcare®](#) information sheets – *Coping with Low Water Levels, Water Conservation and Selecting a Well Contractor* – available in print by calling 888-395-1033 or online at www.watersystemscouncil.org/wellcare/infosheets.cfm

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:

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

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.

Contact us at 888-395-1033 or visit www.wellcarehotline.org or www.watersystemscouncil.org



This publication was developed in part under Assistance Agreement No. X-82849101-1 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of WSC. EPA does not endorse any products or commercial services mentioned in this publication.