

# **wellcare<sup>®</sup> information for you about**

# **Well Components:**

# **Your Well Pump**

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The well pump raises water from your well and delivers it to a storage tank, where it is held under pressure until you need it. The pump refers to both the pump itself and an electric motor, which together make up the pumping unit.

There are many types, kinds and sizes of pumps for water systems. Some are designed simply to remove water from a source. Others also force water through the rest of the system. Some pumps serve special purposes, such as boosting water pressure or supplying a special water outlet.

Your well pump may be one of several types: shallow-well or deep-well, and submersible or reciprocating. Selecting or sizing the well pump is a critical step in the design of your water well system. If your pump installation is not properly planned, you won't receive satisfactory water delivery.

The size of your well pump is based on the yield of your well and the needs of your household. The pump must meet normal peak demand for the household, rather than average use. One general rule is to never install a pump that has a greater capacity than your well, unless you need to use well storage, along with well yield, to meet your peak demand for water.

If the peak demand exceeds the maximum rate of water available, the pump must be sized within the well capacity and the peak demand reached through added storage. Usually a large-size pressure tank can perform this function.

In fact, a larger water storage tank can prolong the life of your pump, as it reduces the need for the pump to cycle as often. Most wear and tear on a well pump occurs when it stops and starts.

There are times, however, when the well capacity is so low that a two-pump system is needed. The well pump supplies water to a storage tank. A second pump, a shallow well or booster pump unit, then moves water from the atmospheric tank and discharges it into a pressurized storage tank or directly into your system. Its operation is controlled by a pressure switch or special controller.

Your water well professional can do the analysis to the correct size pump for your system and suggest options for improved water pressure or expanded storage capacity.

## For more information on well components

*Water Systems Handbook: A Complete Text on Wells*, published by Water Systems Council, 11th Edition, 2000. Available for a fee from [www.watersystemscouncil.org](http://www.watersystemscouncil.org) or by calling 202-625-4387.

*Sizing A Well Pump* information sheet from Water Systems Council at [www.watersystemscouncil.org/upload/wellcare/wsc\\_inst\\_20.pdf](http://www.watersystemscouncil.org/upload/wellcare/wsc_inst_20.pdf) or by calling 202-625-4387.

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## 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](http://www.watersystemscouncil.org)



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**Well water naturally better... Contact your local water well professional**