



Watershed
Committee
of the Ozarks

HOW TO PROTECT YOUR WELL



GREENE COUNTY
GROUNDWATER
GUARDIAN

Your family's health depends on a safe, reliable source of water for drinking, bathing and other needs. Your well is also valuable because it represents a large financial investment. These are two very good reasons for protecting your well.

How can you protect both your well's water quality and your investment? Here are some common-sense, effective things you can do:

◆ **Find out** what kind of well installation you have (see box). Below-ground (pit) installations are more easily contaminated. Having a well casing that sticks up above ground level will help prevent surface water pollution. If your well is in a pit or otherwise below ground, it is important to prevent water from standing over the seal at the top of the well.

◆ **Find out** how old your well is. Older wells are more subject to problems, especially because they may only be cased to a shallow depth. More rigid well construction standards have been in effect since 1987.

◆ **Check your** well casing and seal to be sure there are no cracks or holes in the casing and no open holes in the seal. A screened vent pipe should extend up out of a sanitary seal installation (see box) to prevent a vacuum from forming inside the well when the pump kicks on. A vacuum can suck contamination into the well.

◆ **If you must** create a possible pollution source on your property, be sure to place it as far as possible from the well. Minimum separation distances are: septic tank - 50 feet; septic drain (absorption) fields, manure

pits, livestock/poultry yards, cesspools, unplugged abandoned wells - 100 feet; bulk fuel storage, chemical storage, lagoons - 300 feet.

◆ **Never store** materials like pesticides, gasoline, or pool chemicals in your well house or near a well. Many wells have been contaminated by spills or leaks of such materials.

◆ **Be careful** to prevent back-siphonage (see circle on back). Never leave hoses submerged in wash basins, stock tanks, or swimming pools.

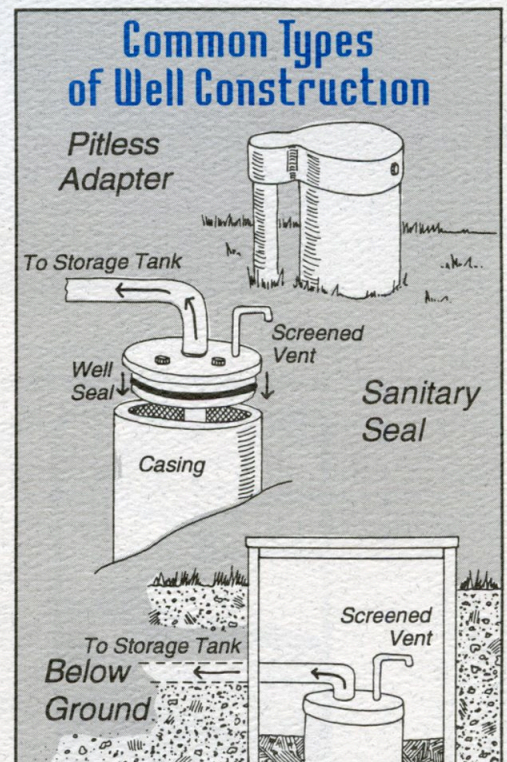


A Common Myth

A common myth is that our groundwater originates hundreds of miles away. In reality, most local groundwater comes from rain that has fallen nearby, within a few miles or closer. The sources of pollution that could harm our wells are often located in our neighborhood or even on our own property.

◆ **Have your well** tested for coliform bacteria and nitrates at least yearly. Keep a record of these tests which screen for possible pollution.

◆ **If your well** gets cloudy or tastes different after a rain, or if the (over)



quality changes suddenly anytime, it could be a sign of pollution. Get your well tested as soon as possible.

Before hiring someone to drill a new well, ask friends and neighbors to recommend a driller. Only hire a driller who is state-permitted and make sure your well receives a state

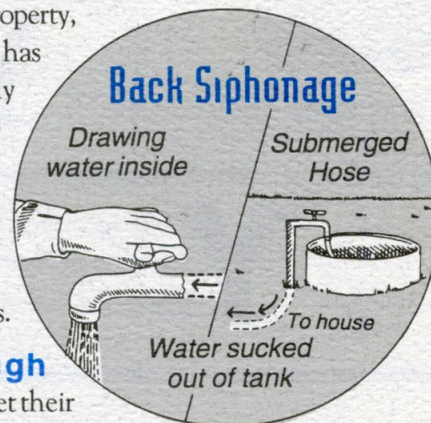
COLIFORM bacteria are commonly found in warm-blooded animals, in soil and on vegetation. Their presence in a well may indicate that contaminated water has seeped into the well.

NITRATES are chemicals found in fertilizers, sewage and animal waste. Nitrates are especially hazardous to infants. The Public Health Service recommends that drinking water contain no coliform bacteria and 10 parts per million or less of nitrates.

certification number. Attach the certification tag securely to the well.

If you have an abandoned well on your property, make sure it has been properly sealed to keep it from polluting your current well, or those of your neighbors.

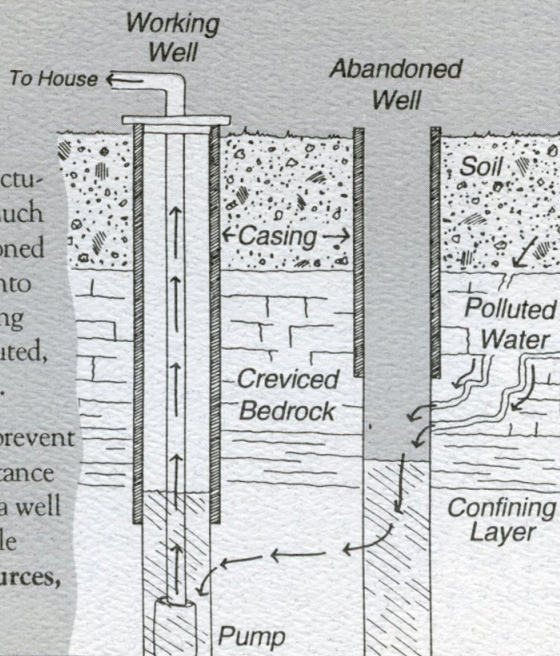
Although most people get their water from drilled wells, some homes use hand-dug wells, cisterns, or springs.



Abandoned Wells (The Hidden Danger)

Abandoned wells received attention and notoriety a few years ago when little Jessica McClure got stuck in a well shaft in Texas. Actually, the most common well safety hazard is much less obvious. The open borehole of an abandoned well can easily allow contamination to flow into groundwater aquifers. These deep water-bearing layers of rock are our water supply. Once polluted, they are difficult, or even impossible, to clean.

Abandoned wells must be properly sealed to prevent such pollution. In some cases, cost-share assistance is available to homeowners who want to seal a well on their property. Technical advice is available from **Missouri Department of Natural Resources, Southwest Regional Office, 417-891-4300.**



These water sources are easily contaminated and require special protection measures. Call your local health department for more information.



Groundwater Guardian is a program created by the National Groundwater Foundation to recognize and assist communities which are actively protecting groundwater resources.

The Watershed Committee of the Ozarks is a not-for-profit citizen advisory group dedicated to the protection of drinking water sources in the Springfield area.



Watershed Committee of the Ozarks

320 N. Main
Springfield, MO
65806-1018

417-866-1127

Other publications available from the Watershed Committee

Watershed News -Quarterly newsletter (free)

Ozark Water Cycle -A brochure discussing the proper design, installation and maintenance of septic tank systems (free)

Sinkholes-Inlets to the Groundwater System -How to recognize sinkholes, how they function, and how they affect groundwater (free)

Water Protection at Home -What you can do to prevent water pollution at home and in your community (free)