

A HOMEOWNER'S GUIDE TO

WELL WATER

Homeowners are responsible for maintaining their own individual wells and ensuring the safety of their drinking water. Taking precautions to protect and maintain your well is essential to ensuring your home has a consistent supply of high-quality drinking water. You should have regular maintenance done on your well and keep records of the work that is done. Preventative maintenance is less costly in the long run.



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WELL MAINTENANCE TIPS

- ✓ Test your well water annually by a certified lab for bacteria and nitrates, or any time you notice a change in the color, odor or taste of your water or have the water supply system serviced or repaired.
- ✓ If you suspect physical damage to your well has occurred, contact a qualified professional to check the structural integrity of the well such as the grout, well casing, and well cap. Always use licensed well drillers and pump installers.
- ✓ Be careful about storage and disposal of household and lawn care chemicals and wastes near the well.
- ✓ Make sure the ground slopes away from the well head for proper drainage so that harmful bacteria and chemicals on the land surface cannot collect and seep into it.
- ✓ Properly abandon and seal any old, unused wells to prevent direct contamination of groundwater.
- ✓ Keep accurate records in a safe place, including; well construction report, water testing results, maintenance records, etc.

COMMON PROBLEMS

A variety of common problems may occur due to contaminants in your well water that do not pose a risk to human health. These problems are often related to aesthetic, cosmetic or technical effects in your water

and water supply equipment. The following contaminants are subject to EPA's Secondary Drinking Water Regulations and are associated with the following effects:

CHLORIDE
corrosion, salty taste



COPPER
metallic taste, blue-green staining



MANGANESE
black to brown color, black staining, bitter metallic taste



IRON
rusty color, sediment, metallic taste, reddish or orange staining



HARDNESS
(dissolved calcium and magnesium) – scale, mineral buildup, poor performance of soaps and detergents



TOTAL DISSOLVED SOLIDS
(any minerals, salts, metals, cations or anions dissolved in water) – hardness, mineral deposits, colored water, staining, salty taste

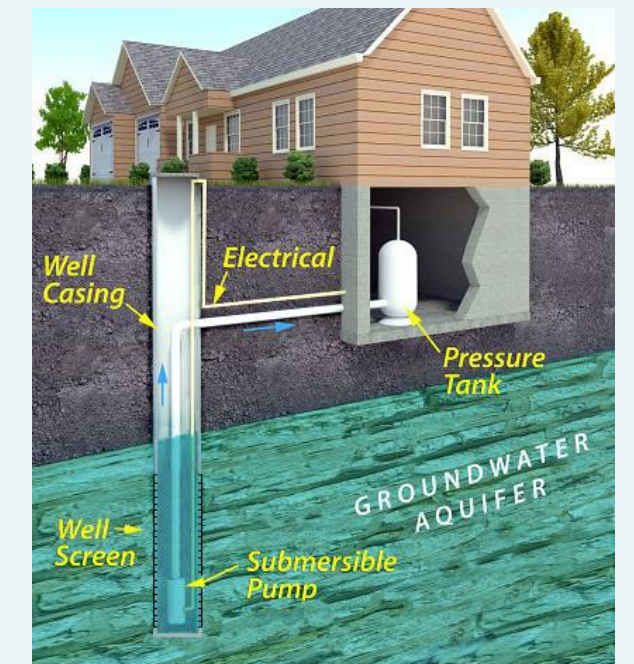


OBSERVE AND TAKE ACTION

If you experience abnormal characteristics or sudden changes in your water quality, you should test your water, and if needed have the well examined by a qualified professional. Conventional water treatments will remove a variety of secondary contaminants such

as water softeners, reverse osmosis, activated carbon filters, etc. For questions or to request well permit records please contact Montgomery County Dept. of Permitting Services Well and Septic Section by calling 240-777-0311.

ANATOMY OF A WELL



Most modern wells are drilled wells ranging from hundreds to thousands of feet deep. They have a lower risk of contamination due to continuous well casing and the use of grout that fills the annular space on the outside of the well. A submersible pump is placed inside the well casing and connected to a power source to pump water to your home. A two-piece well cap is placed on top to prevent debris and insects from entering the well. A pressure tank inside the home provides storage for your water system. Groundwater flows through fractures in the aquifer supplying your well with fresh, naturally filtered water. Infiltration from rain and snow melt replenishes the groundwater but seasonal variations in rainfall and the occasional drought also impact groundwater levels.

RESOURCES

American Groundwater Trust

agwt.org

Environmental Protection Agency

epa.gov

National Groundwater Association

wellowner.org

United States Geological Survey

water.usgs.gov

University of Maryland Extension

extension.umd.edu

Water Systems Council

watersystemscouncil.org



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Department of Permitting Services
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