How to Inspect and Maintain Your DOMESTIC WATER WELL

Annual inspection and proper maintenance of your water well can help ensure the longevity of your domestic water supply. Early detection of any problems can save you time and money and eliminate issues that could impact groundwater quality.

Surface Seal

A properly completed and maintained well has a surface seal in good condition. If your well has a concrete slab, look for severe cracks or deterioration that may occur. These issues may lead to erosion near the casing and compromise the well structure at the surface. Instead of a slab, some wells have a steel or PVC sleeve around the well casing. Like a slab, this protects the well casing and maintains a proper seal between the bore hole and casing. Ensure the sleeve fits properly and is not damaged.

Electrical Connection

Inspect the electric control box and wires. Weather and rodents may damage wires that are not inside a conduit. If wires are damaged, there might be a risk of electrical shock. Use caution when inspecting.

Well Plate

The well plate should securely fit on top of the casing. Also, there should be a proper fit where the electrical wires enter the well plate. This ensures that the casing and your water source are not exposed to any unwanted debris. During the winter, a well may be covered with insulation. Mice and other rodents may be drawn to these areas and can contaminate a well that is not properly sealed and maintained.

Soil Surface

The soil surface near the well should be sloped so that water drains away from the well casing, slab or casing sleeve. This helps prevent any possible contamination from runoff that may occur following a rain event.

Surrounding Area

Keep the area around your well clean. Trash and overgrown vegetation may hide problem areas and encourage rodent and snake activity. Do not store chemicals in well houses or near well heads.

Water Quality

It is important to test water quality every year, as well as after flood events or if your water looks, smells or tastes unusual. Contamination can occur from improperly maintained well sites. If your water quality testing shows a problem, be sure to follow the laboratory's recommendations as soon as possible.

Contact your pump installer or water well driller if you note any problems during your inspection. These licensed professionals are skilled at water well repair and maintenance.

What do I do if I think my well has a water quality issue?

Consider a water quality test if the water from your faucets looks, smells or tastes unusual. If anyone in your household has a persistent stomach illness, a water quality problem might be the source. Here are the next steps to check your water quality.

Contact a Local Water Testing Facility

Contact a certified water laboratory in your area and request a drinking water analysis. Some health departments will test domestic well water for E. coli and coliform bacterias but do not do a full water quality array.

Collect a Water Sample

Ask your water testing laboratory how to collect a water sample. A certified testing facility will supply you with a sterile bag. Follow the laboratory's directions for collecting the water so as not to contaminate your sample.

Wait for the Results

If you suspect an E. coli or coliform contamination, consider using alternate sources of water or boiling water for drinking, cooking, making ice, preparing food, bathing, or washing clothes.

Disinfecting Your Water Well

If the test is positive for E. coli or coliform bacteria, you will need to disinfect your well. Chlorination treatments are the most common way to do this. You can have your well driller or pump installer chlorinate the well, or you can do it yourself. For information on how to disinfect your well, go to tdlr.texas.gov/wwd/welldisinfection.pdf
Retest the water after treatment to ensure the well is properly disinfected. If disinfection attempts fail, contact your well driller, pump installer or local health department for further assistance.

Additional Resources

Texas Well Owner Network
twon.tamu.edu

Environmental Protection Agency
epa.gov/privatewaterwells

Texas Commission on Environmental Quality
tceq.texas.gov

Texas Dept. of Licensing & Regulation, Water Well Drillers & Pump Installers
tdlr.texas.gov/wwd/wwd.htm

National Groundwater Association
ngwa.org

High Plains Underground Water Conservation District
hpwd.org | 806.762.0181 | 2930 Avenue Q, Lubbock, TX 79411

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