Things to Consider Before Owning a DOMESTIC WATER WELL

Disconnecting from a municipal or regional water supply and hooking up to your own water well comes with freedoms and responsibilities. Here are some things to consider before moving away from an established water supply system.

What is the availability of water on your property?

Just because a neighbor down the road has a productive well does not guarantee that you will have adequate recoverable water. Consult a professional hydrologist or your local groundwater district.

Do you have water quality information?

Hard water is common on the Southern High Plains, and other mineral deposits may also be present. A professional laboratory can test your water quality.

What is the productivity of water wells in your neighborhood?

Our aquifers recharge at a relatively slow rate. A professional hydrologist or your local water district can help you understand this issue.

What is the long term plan for the area you are considering?

Do you have hydrologic data to verify adequate groundwater supplies to maintain the number of homes or businesses in the area? Consider the number of nearby wells and their uses. Different water users may pump at different times and frequencies throughout the year.

Do you have the expertise or desire to maintain your domestic well?

A newly developed well and pump are less likely to have problems than older wells, which sometimes need continual maintenance and repair. Frozen pipes during the winter, cave-ins during heavy rains, power outages, and other natural occurrences can happen. If you are outside of city limits or a water supply district, your well will be your only source for potable water. Be aware of the potential maintenance and expenses that may occur.

Is there an alternative if your supply is interrupted?

Wells use pumps, and if the electricity goes out, you will not have a way to recover water from your well. Consider a small rainwater harvesting system for a nonpotable water source, and keep jugs of water on hand in case of an outage.

Is your land located in a local water district?

Water districts can provide information about water availability and water quality. Depending on which water district you are located in, you might have to apply for a drilling permit or adhere to local water regulations.

Are there existing wells on the property?

If you purchase property with an existing well, gather information on the construction and maintenance of the well, as well as the current water level measurement. Also inquire whether the well equipment is covered by homeowners insurance.

Consider fire protection.

Consider fire protection in the area you are located. Not all domestic wells are able to sustain the yield needed for fighting a fire. If a fire were to break out in or near your home, where will the water come from to extinguish the flames?

Consider landscape water requirements for your property.

Much of our daily water is used outdoors to irrigate our lawn and landscape. Install drought tolerant plants, and calculate how much irrigation your lawn will take each year. It takes one inch (approximately 0.62 gallons per square foot) of water per week to maintain a Bermuda grass lawn. A 7,000 square foot of lawn needs 4,340 gallons each week. If you plan to water your lawn 40 weeks out of the year, you will use approximately 174,000 gallons of water solely for Bermuda grass irrigation, or about ½ acre foot of water.

Consider alternative water sources.

Rainwater harvesting and greywater can be used to offset your use of groundwater for outdoor and other nonpotable water uses. Consider installing these systems to improve the longevity of your well and water supply.

Consider efficient fixtures.

Consider installing high efficiency shower heads and faucet aerators throughout your home to reduce your daily water use. When purchasing new appliances, choose EPA WaterSense certified appliances for additional water savings.

Make water conservation a daily habit!

Making simple changes to your daily routine can conserve large amounts of water over time. Turn off the faucet when brushing your teeth and shaving. Take shorter showers. Only run the dishwasher and the washing machine when full. Make sure your outdoor irrigation systems are functioning properly. Fix leaks as soon as you find them.

Additional Resources

Texas Well Owner Network
twon.tamu.edu

Texas Commission on Environmental Quality
tceq.texas.gov

Texas Water Development Board
twdb.texas.gov

National Groundwater Association
ngwa.org

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

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HIGH PLAINS UNDERGROUND WATER CONSERVATION NO. 1
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