

As a Property Owner, What Should I Know About My Water Well?

As a private owner of a domestic water well, you are responsible for maintaining your water well and plugging unused water wells on your property. It is necessary to properly construct, maintain, and plug water wells to prevent the water wells from becoming a pathway for contamination to pollute the groundwater. This FAQ describes information water well owners should know to benefit current and future owners.

Drilling and Installing Your Water Well

If you are having a water well installed on your property, and you are not installing it yourself, you must use a water well driller licensed with the State of Texas who will submit a well report on the construction information to the state for each well drilled.

If you are installing the water well yourself, you must follow all local and state laws on water well location and construction, and you must file all the required reports.

Request copies of the well reports. Know the depth of the well, the depth of the well screen, the type of water well casing, depth to groundwater inside the well casing, and the type and depth of the pump used to bring groundwater to the surface for storage, treatment (if necessary) and use. The depth and type of pump may not be listed on the driller's report. You may locate the driller's report for the well by checking with the well driller, local Groundwater Conservation District (GCD), or at the following State of Texas data viewer web sites:

- Texas Water Development Board's (TWDB) "Water Data Interactive" viewer, <https://www2.twdb.texas.gov/apps/WaterDataInteractive/GroundwaterDataViewer/?map=sdr>
- Texas Commission on Environmental Quality (TCEQ) "Water Well Report Viewer," <https://www.tceq.texas.gov/gis/waterwellview.html>

Your water well must be properly sealed at the surface to prevent pollution of the groundwater. The well should have a concrete pad or plastic/steel sleeve at the surface designed to direct surface drainage away from the well.

Water Quality Testing

If your water quality (taste or smell) changes, it is important to understand how the water that you use in your household moves from the source (the aquifer in the ground) to the tap (in the kitchen, bathroom, and garden) to identify the source of a problem.

Know if any water quality testing has been performed, and the results of the testing. Annual testing of water well samples for *E. coli* bacteria and nitrate-nitrogen is recommended. TCEQ provides a webpage with information on Environmental Laboratory (NELAP) Accreditation, including a list of NELAP-accredited labs:

https://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html

If *E. coli* are present in your annual well sample, the well should be disinfected and inspected for repairs or your water should be treated to remove bacteria before using for drinking, cooking, or bathing. The well water should then be re-sampled to confirm that *E. coli* are no longer present. If you already have a treatment system, then repair or maintenance may be required to restore function to the filter or remove bacterial or other organisms that may cause illness.

If your annual well sample for nitrate-nitrogen exceeds 10 mg/L then you should contact your local health authorities and/or local water well professional for guidance on treating your well water or switching to a different water supply.

Water Well Location

Know the location of the well relative to your property line, septic tank, and septic field, if present. A water well should be located a minimum distance from a property line to be compliant with local GCD and/or state regulations

<https://www.tdlr.texas.gov/wwd/laws-rules.htm>

If your well is located within a GCD, you may be required to register or permit your well with the GCD and there may be limits to how much groundwater you may pump. Information about GCDs can be obtained from the Texas Alliance of Groundwater Districts' website, <https://texasgroundwater.org/>.

Upon sale of the property, the seller must disclose whether there is a well on the property and its condition (Tex. Property Code, Title 2, Chapter 5, Section 5.008).

Water Well Plugging

The well owner must monitor the condition of the well. A deteriorated well not in use must be plugged. A well in good condition may be capped. The landowner or person in possession of the well is responsible for capping or plugging it, in accordance with Texas Administrative Code (TAC), Title 16, Part 4, Chapter 76, Section 76.70.

Resources and Useful Links

- TDLR webpage, "Well Construction and Plugging Specifications," <https://www.tdlr.texas.gov/wwd/wwdspecs.htm>.
- Texas Well Owner Network (TWON), *Well Owner's Guide to Water Supply*, <https://agrilifeextension.tamu.edu/asset-external/twon-well-owners-guide-to-water-supply/>.
- Texas A&M AgriLife Extension, *Water Well Basics*, https://twon.tamu.edu/wp-content/uploads/sites/3/2021/06/esc-013_water-well-basics.pdf.

Other Frequently Asked Questions (FAQs)

To find additional FAQs visit the Texas Groundwater Protection Committee's FAQ webpage at <https://tgpc.texas.gov/frequently-asked-questions-faqs>.