What Are the Statewide Water Well Databases?

More than one million water wells have been dug or drilled in Texas. In addition to being used for domestic (i.e., household) and public water supply, water wells also support a variety of other purposes including but not limited to:

- Irrigation
- Industrial
- Stock (for livestock)
- Test Wells (for sampling groundwater quality or quantity, or exploring for soil or groundwater contaminants)
- Rig Supply (for drilling and completion of oil and gas wells)
- Hydraulic fracturing (or "fracking" using a pressurized fluid to start and then spread a fracture in a rock layer in order to release oil or gas)
- De-watering, Injection, and Monitoring (DIM) applications, including Environmental Soil Borings, Extraction (for removing groundwater contaminants), and Closed-Loop Geothermal systems

A water well report (https://www.tdlr.texas.gov/wwd/wwd001.pdf) typically includes the following information:

- Owner's name and address
- · Physical location of the well (address, latitude/longitude, and grid number)
- · Well type
- Drilling date
- Geologic description of the well
- Well construction details (e.g., diameter, depth, drilling method, and completion data)
- · Pump type and depth (if available)
- Water quantity and quality test data and water level
- · Driller's name, address, and license number

Six searchable, online water well databases provide a wealth of data on the water wells that exist in Texas:

- Created in 2001, the joint Texas Water Development Board (TWDB) and Texas Department of Licensing and Regulation (TDLR) "Submitted Drillers Report (SDR) Database" (https://www.twdb.texas.gov/groundwater/data/drillersdb.asp) includes over 650,000 reports and over 230,000 plugging reports submitted by water well drillers. An explanation of the Reports Toolbar is available (https://www.twdb.texas.gov/groundwater/data/doc/PageNavigationControls.p df).
- For wells drilled as early as 1820, the TWDB "Groundwater Database (GWDB)" (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) includes over 140,000 water well records. An explanation of the *Reports Toolbar* is available (https://www.twdb.texas.gov/groundwater/data/doc/PageNavigationControls.p df).
- Data from both the GWDB and SDR databases can be viewed in the TWDB "Groundwater Data Viewer," and interactive map application (https://www3.twdb.texas.gov/apps/WaterDataInteractive/GroundWaterDataVie wer). A Quick Reference Guide for this system is available (https://www3.twdb.texas.gov/apps/waterdatainteractive/Content/help.pdf).
- The Texas Commission on Environmental Quality (TCEQ) Water Well Report Viewer (https://www.tceq.texas.gov/gis/waterwellview.html) allows users to geographically locate and view copies of at least one million scanned water well reports submitted by drillers since 1960. A User Guide for this system is available (https://www.tceq.texas.gov/downloads/gis/docs/water-well-reportviewer-user-guide-eb.pdf).
- For public drinking water sources, the TCEQ "Source Water Assessment and Protection Viewer" (https://www.tceq.texas.gov/gis/swaview) displays not only water wells and surface water intakes, but also provides information such as well depth and drilling date. A *User Guide* for this system is available (https://www.tceq.texas.gov/downloads/gis/docs/source-water-assessment-andprotection-viewer-user-guide-eb.pdf).
- The TCEQ "Texas Drinking Water Watch" database (https://dww2.tceq.texas.gov/DWW/) displays detailed information on public water systems, including their drinking water sources, and users can obtain information such as drilling date and pumping rate for the public drinking water wells. Instructions for using the Texas DWW Database are available (https://www.tceq.texas.gov/drinkingwater/instructions-for-texas-drinking-waterwatch rch Paramaters.htm).

Groundwater Conservation Districts (GCDs) also maintain records and registrations for water wells specific to their jurisdictions. Contact your local GCD for assistance in obtaining up-to-date information on water levels, pump levels, and any recent changes made to your water well. Most GCDs are members of the Texas Alliance of Groundwater Districts (TAGD), https://texasgroundwater.org/ – you can click on

Members/Current Members/District Members to get specific GCD contact information. All GCD contact information can be found on TCEQ's website at: https://www.tceq.texas.gov/downloads/groundwater/gcd/gcd-contact-list.pdf.

A local licensed water well driller may also be familiar with nearby water wells.

In addition, the United States Geological Survey (USGS) National Water Information System (https://waterdata.usgs.gov/nwis) has historical records from water wells across the country and this online database can be searched for detailed location, depth, aquifer, water level, and water quality information for selected water wells in Texas.

- In the upper right corner of the webpage, click the drop-down menu under "Data Category" and choose "Mapper."
- Next, click the drop-down menu under "Geographic Area" and choose "Texas."
- Select Texas from the "Zoom to:" dropdown menu; more specific location information can also be added, if desired.
- · In the left-hand column's "Sites" tab, un-check "Surface-Water Sites" and check "Groundwater Sites."
- Zoom in until you can click on a site to get detailed information about the water well.

Resources and Useful Links

- TDLR Well Report form 001, https://www.tdlr.texas.gov/wwd/wwd001.pdf
- TCEQ GCD webpage, https://www.tceq.texas.gov/groundwater-groundwater-planning-assessment/districts.html a map of Texas GCDs, summary description of GCDs, and GCD contact list are available
- TAGD website, https://texasgroundwater.org/ click on "Members/Current Members/District Members" to get specific GCD contact information
- USGS National Water Information System, https://waterdata.usgs.gov/nwis
- Additional USGS resources include the Groundwater Information Pages (https://www.usgs.gov/mission-areas/water-resources/science), and information on Groundwater Watch (https://waterdata.usgs.gov/blog/gww/).

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.