

## 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 “fracing” – using a pressurized fluid to start and then spread a fracture in a rock layer in order to release oil or gas); and,
- 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 (<http://www.license.state.tx.us/wwd/wwd001.pdf>) typically includes the following information:

- Owner’s name and address;
- Physical location of the well (address, lat/long, 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; and,
- Driller’s name, address, and license number.

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

- The joint Texas Water Development Board (TWDB) and Texas Department of Licensing and Regulation (TDLR) Texas Well Report Submission and Retrieval System (<https://texaswellreports.twdb.state.tx.us/drillers-new/index.asp>) includes over 270,000 reports submitted by water well drillers since 2001.

- For wells drilled as early as 1820, the TWDB Water Information, Integration, and Dissemination (WIID) System ([http://wiid.twdb.state.tx.us/index\\_explain.asp](http://wiid.twdb.state.tx.us/index_explain.asp)) includes approximately 136,000 water well reports in the TWDB Groundwater Database. Data from these wells can be viewed in an interactive map application, and wells in the joint TWDB/TDLR System can also be accessed by selecting Submitted Driller's Reports and zooming in until the 2.5' State Grid layer is visible and active.
- The Texas Commission on Environmental Quality (TCEQ) Water Well Report Viewer (<http://www.tceq.state.tx.us/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.
- For public drinking water sources, the TCEQ Source Water Assessment Viewer (<http://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.
- The TCEQ Texas Drinking Water Watch (<http://dww.tceq.state.tx.us/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.

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, <http://www.texasgroundwater.org/> – you can click on “Membership/Current Members/District” to get specific GCD contact information. 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 (<http://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.

#### References:

- TDLR Well Report form 001, <http://www.license.state.tx.us/wwd/wwd001.pdf>
- TDLR Driller's Report Frequently Asked Questions, <https://texaswellreports.twdb.state.tx.us/drillers-new/faq.asp>
- A Quick Guide to the WIID, <http://www.twdb.state.tx.us/waterexploration/water/challenge2/documents/WIID-quick-guide.pdf>

- TCEQ Water Well Report Viewer User Guide, <http://msgisweb2.tceq.state.tx.us/waterwellpublic/publicWaterWellUserGuide.pdf>
- TCEQ Source Water Assessment Viewer User Guide, <http://gis3.tceq.state.tx.us/swav/common/userGuide.pdf>
- TCEQ Public Water Supply Systems Search Parameters, [http://dww.tceq.state.tx.us/DWW/Help/html\\_Public\\_Water\\_Supply\\_Systems\\_Search\\_Parameters.htm](http://dww.tceq.state.tx.us/DWW/Help/html_Public_Water_Supply_Systems_Search_Parameters.htm)
- TCEQ GCD webpage, <http://www.tceq.texas.gov/groundwater/districts.html> – a map of Texas GCDs, summary description of GCDs, and GCD contact list are available
- Texas Alliance of Groundwater Districts, <http://www.texasgroundwater.org/> – click on “Membership/Current Members/District” to get specific GCD contact information
- USGS National Water Information System, <http://waterdata.usgs.gov/nwis/>:
  - Click on the “Mapper” button in the bottom left corner of the webpage
  - Select Texas from the “Zoom to:” dropdown menu; more specific location information can also be added, if desired
  - Un-check “Surface-Water Sites” and check “Groundwater Sites” in the left hand column
  - Sites are clickable when the Zoom level is 11 or greater; click on a site to get detailed information about the water well
- Additional USGS resources include the Groundwater Information Pages (<http://water.usgs.gov/ogw/>), Groundwater Data for the Nation (<http://waterdata.usgs.gov/nwis/gw>), and Groundwater Watch (<http://groundwaterwatch.usgs.gov/>)

For additional Frequently Asked Questions (FAQs) related to groundwater quantity, groundwater quality, septic systems, water wells, administrative entities, and publications, visit the TGPC’s FAQ webpage at <http://www.tgpc.state.tx.us/FAQs.htm>.