# Groundwater Level Monitoring: Collection and Dissemination

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### What is a groundwater monitor well?

Used to measure or monitor the level, quality, quantity or movement of subsurface water

- Unused/unequipped for levels
- In good condition
- Documentation on well completion
- Owner permission

## Why monitor groundwater levels?

Provide data for groundwater management

- Desired Future Conditions (DFCs)
- Calibrate and execute groundwater models
- Accumulate data on hydrologic stresses
- Provide information for well/land owners
- Depth of water for drilling wells
- Proximity of water level to pump level

## Where to monitor groundwater levels?

Wherever people are using a groundwater resource

- Updip and downdip of same unit
- Multiple layers at same location
- High pumpage areas

## Who monitors groundwater levels?

- United States Geological Survey (USGS)
- Texas Water Development Board (TWDB)
- Groundwater Conservation Districts (GCDs)
- Universities
- Consultants
- Drillers
- Non-profit groups
- Private citizens

# How to monitor groundwater levels?

- Observe the surrounding area
- Steel tape, electric line, air line, transducers
- Take multiple measurements
- Document measurement as depth from land surface

### When to monitor groundwater levels?

- At least annually increased frequency provides better data
- Low pumping seasons (winter)
- Automated recorder wells provide continuous monitoring

### Accessing the Data

- Reports and Full Groundwater Database (GWDB)
   Download at:
   http://www.twdb.texas.gov/groundwater/data/gwdbrpt
   .asp
- Water Data Interactive (WDI) Groundwater Data Viewer at:
  - http://www2.twdb.texas.gov/apps/WaterDataInteractive/GroundwaterDataViewer/

















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### **Groundwater Database (GWDB) Reports**

The Texas Water Development Board (TWDB) Groundwater Database (GWDB) contains information on selected water wells, springs, oil/gas tests (that were originally intended to be or were converted to water wells), water levels, and water quality to gain representative information about aquifers in Texas to support water planning from a local to a more regional perspective.

Except where noted, all of the information provided in the GWDB is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no quarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the GWDB. TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. Check out the Explanation of TWDB Groundwater Database for more information.

### Reports and Downloads

Reports are designed to view a select set of information in the GWDB, not for viewing all records in the database. Reports allow the user to select or enter certain information to obtain records for that specific criteria. There is an option to export the reports to several different formats; although the reports are optimized for viewing as PDF and CSV formats. To get the entire GWDB, go to the Downloads section below.

### Reports

### Aquifers

Groundwater Management Areas

**Groundwater Conservation Districts** 

### Groundwater Data

- Numbered Reports
- Bulletins
- Historical Groundwater Reports
- Automated Groundwater Level Wells
- Groundwater Database (GWDB)
- Submitted Drillers Reports (SDR) Database
- Water Data Interactive (WDI) Groundwater Data Viewer

### **Groundwater Models**

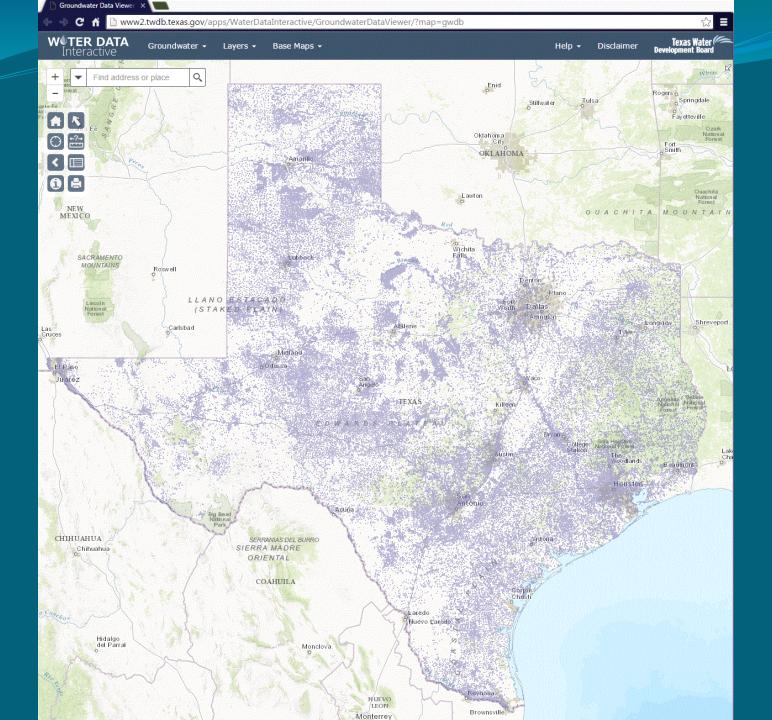
Groundwater Educational Videos

Regional Water Planning Areas

Special Projects

Rules and Statutes

Frequently Asked Questions



### Questions & Feedback

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The statements contained in this presentation are my current views and opinions and are not intended to reflect the positions of, or information from, the Texas Water Development Board, nor is it an indication of any official policy position of the Board.