

# Online Databases for Texas Water Resource Data

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Below are links to general water-resource databases maintained by agencies and programs.

## Texas Water Development Board

TWDB databases are accessible at: <http://www.twdb.state.tx.us/data/data.asp>.

**Groundwater data reports** for countries, aquifers, or other geographic areas, are at <http://www.twdb.state.tx.us/publications/reports/GroundWaterReports/GWDatabaseReports/GWdatabaserpt.htm>.

A **map based database** for groundwater data and submitted driller's reports is at <http://wiid.twdb.state.tx.us/>.

The TWDB homepage for **surfacewater data** is at [http://www.twdb.state.tx.us/data/surfacewater/surfacewater\\_toc.asp](http://www.twdb.state.tx.us/data/surfacewater/surfacewater_toc.asp).

An interactive Web page presenting information and data for all **major Texas reservoirs** and is online at <http://wiid.twdb.state.tx.us/ims/resinfo/viewer.htm>. By clicking on the link "all reservoirs" near the bottom of the page, a file will be opened presenting a Texas Reservoir Information Sheet. That file can be stored by saving as a Web Archive or Web page.

## US Geological Survey

All USGS water data for Texas is available at <http://waterdata.usgs.gov/tx/nwis/nwis>, with the exception of historic daily stream water quality data, historic daily suspended-sediment data, and historic daily reservoir water level and storage content data—the availability for these data are discussed below.

### General Data Links

**USGS surfacewater data** is online at <http://waterdata.usgs.gov/tx/nwis/sw>.

Presented are:

real-time and recent data for reservoir water levels and streamflow discharges and water levels;  
historic data for daily, monthly, and annual streamflow-discharge and annual-peak discharge; and  
streamflow measurements of instantaneous discharge.

**USGS groundwater data** is online at <http://waterdata.usgs.gov/tx/nwis/gw>

Presented are well site descriptions, and real-time and historic water levels.

**USGS water-quality data** is online at <http://waterdata.usgs.gov/tx/nwis/qw>

Presented are:

real-time and recent data for stream water quality, and  
historic data for stream and groundwater quality.

## Specific Data Links

### Real-time data

**Real-time incremental stream water-level and discharge data** for the present and past 31 days are available for about 429 stream sites at <http://waterdata.usgs.gov/tx/nwis/current/?type=flow>.

**Real-time incremental reservoir water-level data** for the present and past 31 days are available for about 121 reservoirs at [http://waterdata.usgs.gov/tx/nwis/current/?type=lake&group\\_key=NONE](http://waterdata.usgs.gov/tx/nwis/current/?type=lake&group_key=NONE).

**Real-time incremental groundwater level data** for the present and past 31 days are available for about 47 wells at <http://waterdata.usgs.gov/tx/nwis/current/?type=gw>

**Real-time incremental stream water quality data** for the present and past 31 days are available for about 46 stream sites at <http://waterdata.usgs.gov/tx/nwis/current/?type=quality>.

### Historic data

Additional details about USGS historic data are presented in Appendix 1 at the end of this report

#### **Historic daily streamflow data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/sw>.

Click on the “streamflow” link to obtain daily values, or on the “monthly” or “annual” links to obtain these data. A link to historic daily streamflow data for all sites in Texas is presented in Appendix 1.

#### **Historic annual streamflow peak data**

The Web page for these data is <http://nwis.waterdata.usgs.gov/tx/nwis/peak>.

#### **Historic daily reservoir water level and storage content data**

By the end of 2005 the USGS also is scheduled to present online values for daily water levels and daily storage contents for about 150 major Texas reservoirs. Much of the data will represent daily-mean values but some will represent once-daily values for data collected at specific times each day.

#### **Historic periodic groundwater water level data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/gw>.

A link to groundwater level data for all sites in Texas is presented in Appendix 1.

#### **Historic periodic stream water quality data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/qw>.

Click on the “samples” link, then the box next to the “site type” link, then “submit”, then “surface water” to obtain these data. A link to periodic stream water-quality data for all sites in Texas is presented in Appendix 1.

#### **Historic daily stream water quality data**

Daily values for water-quality data exist for stations with real-time water-quality data. Daily water quality data are published but not presented online for the 46 sites with such data, but a list of the sites are presented at [http://waterdata.usgs.gov/tx/nwis/current?type=quality&group\\_key=basin\\_cd](http://waterdata.usgs.gov/tx/nwis/current?type=quality&group_key=basin_cd). Information about historic data for about 150 sites with daily-water-quality data are presented in Appendix 1.

#### **Historic periodic groundwater quality data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/qw>.

Click on the “samples” link, then the box next to the “site type” link, then “submit”, then “ground water” to obtain these data. A link to groundwater periodic water-quality data for all sites in Texas is presented in Appendix 1.

**Historic daily suspended-sediment data** for Texas streams are online at <http://webserver.cr.usgs.gov/sediment/selState.cfm>

## **Texas Natural Resource Information System**

The Texas Natural Resources Information System (TNRIS), a Division of the Texas Water Development Board, is the state's clearinghouse for maps, aerial photos, and digital natural resources data. Their data and information is online at <http://www.tnrcc.state.tx.us/index.htm> and their digital data is at [http://www.tnrcc.state.tx.us/DigitalData/data\\_cat.htm](http://www.tnrcc.state.tx.us/DigitalData/data_cat.htm).

## **Texas Commission on Environmental Quality**

Most water data for the TCEQ represents surfacewater quality data online at [http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/swqm\\_data.html](http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/swqm_data.html).

**Surface Water Quality Monitoring** data from TCEQ are available at <http://www.tnrcc.state.tx.us/water/quality/data/wmt/samplequery.html>. An explanation of the database is at [http://www.tnrcc.state.tx.us/water/quality/02\\_twqmar/02\\_305b/02\\_program\\_summary/09-swqmprg.pdf](http://www.tnrcc.state.tx.us/water/quality/02_twqmar/02_305b/02_program_summary/09-swqmprg.pdf) and a data management reference guide for the database is at <http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wdma/2004dmrg.html>.

Information about the Surface Water Quality Monitoring database is presented in appendix 2 at the end of this report.

TCEQ Statewide summary of sampling results from the Statewide **Clean Rivers Program** involving all rivers surfacewater-quality inventories are presented at [http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/305\\_303.html](http://www.tceq.state.tx.us/compliance/monitoring/water/quality/data/wqm/305_303.html) and the site map for 2004 is online at [http://www.tnrcc.state.tx.us/water/quality/04\\_twqi303d/sitemap.html](http://www.tnrcc.state.tx.us/water/quality/04_twqi303d/sitemap.html)

Data and information for **water rights permitting** and availability is at <http://www.tnrcc.state.tx.us/permitting/waterperm/wrpa/permits.html#pending>.

Data and information about **water-quality permits** is at [http://www.tceq.state.tx.us/nav/permits/water\\_qual.html](http://www.tceq.state.tx.us/nav/permits/water_qual.html).

The **TCEQ Data Clearinghouse** is at <http://www.tceq.state.tx.us/admin/data/data.html>.

## **Texas River Agencies**

Web homepages for Texas River Authorities and other river agencies present surfacewater-quality data collected through the Clean Rivers Program sponsored by the TCEQ. Some river agencies collect and present additional water-resource data. Links to the homepages for all river authorities and other agencies participating in the Clean Rivers Program is at <http://www.tnrcc.state.tx.us/water/quality/data/wmt/contract.html>. Those agencies with identified water-resource databases are below.

### **Agency name and database link**

Angelina and Nueces River Authority - [http://www.anra.org/index\\_cleanrivers.htm](http://www.anra.org/index_cleanrivers.htm)

Brazos River Authority - [http://www.brazos.org/CleanRiversProgram/CRP\\_WaterQualityDB.asp](http://www.brazos.org/CleanRiversProgram/CRP_WaterQualityDB.asp)

Guadalupe-Blanco River Authority - [http://www.gbri.org/templates/crp\\_basin\\_map.asp](http://www.gbri.org/templates/crp_basin_map.asp)

Houston-Galveston Area Council - [http://www.h-gac.com/NR/exeres/A2F13100-4935-4176-8AFD-8591688D8C6C.htm?NRMODE=Unpublished&wbc\\_purpose=Basic](http://www.h-gac.com/NR/exeres/A2F13100-4935-4176-8AFD-8591688D8C6C.htm?NRMODE=Unpublished&wbc_purpose=Basic)  
International Boundary and Water Commission - <http://www.ibwc.state.gov/CRP/monstats.htm> (water quality)  
International Boundary and Water Commission - [http://www.ibwc.state.gov/html/rio\\_grande.html](http://www.ibwc.state.gov/html/rio_grande.html) (surfacewater)  
Lavaca Navidad River Authority - [http://www.lnra.org/RI/water\\_quality/default.htm](http://www.lnra.org/RI/water_quality/default.htm) (water-quality data)  
Lavaca Navidad River Authority - [http://www.lnra.org/RI/reservoir\\_data/default.htm](http://www.lnra.org/RI/reservoir_data/default.htm) (reservoir data)  
Lower Colorado River Authority - <http://www.lcra.org/water/index.html>  
Lower Neches Valley Authority - <http://www.lnva.dst.tx.us/>  
Northeast Texas Municipal Water District - <http://www.netmwd.com/reports/reports.html>  
Nueces River Authority - <http://www.nueces-ra.org/cgi-bin/SW/access.cgi>  
Red River Authority - <http://www.rra.dst.tx.us/>  
Sabine River Authority - <http://www.sra.dst.tx.us/data/wq/swqm/default.asp> (water-quality data)  
Sabine River Authority - [http://www.sra.dst.tx.us/basin/lake\\_and\\_river\\_conditions.asp](http://www.sra.dst.tx.us/basin/lake_and_river_conditions.asp) (lake and river data)  
San Antonio River Authority - [http://www.sara-tx.org/site/water\\_quality/water\\_qual\\_mon/stream\\_monitoring.html](http://www.sara-tx.org/site/water_quality/water_qual_mon/stream_monitoring.html)  
Sulphur River Basin Authority - <http://www.sulphurr.org/reports/reports.html>  
Trinity River Authority - [http://www.trinityra.org/Lake%20River%20Data/data\\_menu.htm](http://www.trinityra.org/Lake%20River%20Data/data_menu.htm) (river and lake data)

## **Texas River Watch Program**

Texas State University in cooperation with other agencies, manages a stream sampling program for limited water-quality constituents. The data and site information are at <http://www.texaswatch.geo.swt.edu/Dataviewer.htm>.

## **Texas General Land Office**

The GLO provides Geographic Systems Information data at <http://www.glo.state.tx.us/gisdata/gisdata.html>. All files are presented in ESRI Arc/Info coverage export file and/or ArcView shape file formats. Shape files may be viewed using ESRI's free viewing software, [ArcExplorer](#).

## **Appendix 1 - USGS Historic Data**

### **Historic daily streamflow data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/sw>.

Below is a link to a list of about 782 Texas sites for which daily-mean historic streamflow data are available.

[http://nwis.waterdata.usgs.gov/tx/nwis/discharge?search\\_site\\_no=0&search\\_site\\_no\\_match\\_type=exact&format=station\\_list&sort\\_key=site\\_no&group\\_key=NONE&sitefile\\_output\\_format=html\\_table&column\\_name=agency\\_cd&column\\_name=site\\_no&column\\_name=station\\_nm&column\\_name=lat\\_va&column\\_name=long\\_va&column\\_name=state\\_cd&column\\_name=county\\_cd&column\\_name=alt\\_va&column\\_name=huc\\_cd&list\\_of\\_search\\_criteria=search\\_site\\_no](http://nwis.waterdata.usgs.gov/tx/nwis/discharge?search_site_no=0&search_site_no_match_type=exact&format=station_list&sort_key=site_no&group_key=NONE&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&column_name=alt_va&column_name=huc_cd&list_of_search_criteria=search_site_no)

If the link doesn't work directly, copy it via mouse click and paste it into the Internet Explorer browser.

### **Historic periodic groundwater level data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/gw>.

Below is a link to an inventory of about 5,500 Texas wells with periodic water-level data. The inventory is sorted by well number and by county name.

[http://nwis.waterdata.usgs.gov/tx/nwis/gwlevels?gw\\_type\\_cd=W&format=station\\_list&sort\\_key=site\\_no&group\\_key=county\\_cd&sitefile\\_output\\_format=html\\_table&column\\_name=agency\\_cd&column\\_name=site\\_no&column\\_name=station\\_nm&column\\_name=lat\\_va&column\\_name=long\\_va&column\\_name=state\\_cd&column\\_name=county\\_cd&colu](http://nwis.waterdata.usgs.gov/tx/nwis/gwlevels?gw_type_cd=W&format=station_list&sort_key=site_no&group_key=county_cd&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&colu)

[mn\\_name=alt\\_va&column\\_name=huc\\_cd&begin\\_date=&end\\_date=&date\\_format=YYYY-MM-DD&rdb\\_compression=file&list\\_of\\_search\\_criteria=gw\\_type\\_cd](http://waterdata.usgs.gov/tx/nwis/qwdata?station_type_cd=Y_____&format=station_list&sort_key=site_no&group_key=NONE&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&column_name=alt_va&column_name=huc_cd&begin_date=&end_date=&inventory_output=0&rdb_inventory_output=file&date_format=YYYY-MM-DD&rdb_compression=file&qw_sample_wide=0&list_of_search_criteria=station_type_cd)

If the link doesn't work directly, copy it via mouse click and paste it into the Internet Explorer browser.

### **Historic periodic stream water quality data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/qw>.

Click on: "samples" link; the box next to "site type" link; "submit"; then "surface water" to obtain these data. Below is a link to a list of about 781 Texas streamflow sites for which analyses of periodic water-quality data are available. Several options and methods are available for retrieving data by site, site and water-quality parameter group, site and parameter, parameter groups, dates, or by other options.

[http://nwis.waterdata.usgs.gov/tx/nwis/qwdata?station\\_type\\_cd=Y\\_\\_\\_\\_\\_&format=station\\_list&sort\\_key=site\\_no&group\\_key=NONE&sitefile\\_output\\_format=html\\_table&column\\_name=agency\\_cd&column\\_name=site\\_no&column\\_name=station\\_nm&column\\_name=lat\\_va&column\\_name=long\\_va&column\\_name=state\\_cd&column\\_name=county\\_cd&column\\_name=alt\\_va&column\\_name=huc\\_cd&begin\\_date=&end\\_date=&inventory\\_output=0&rdb\\_inventory\\_output=file&date\\_format=YYYY-MM-DD&rdb\\_compression=file&qw\\_sample\\_wide=0&list\\_of\\_search\\_criteria=station\\_type\\_cd](http://nwis.waterdata.usgs.gov/tx/nwis/qwdata?station_type_cd=Y_____&format=station_list&sort_key=site_no&group_key=NONE&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&column_name=alt_va&column_name=huc_cd&begin_date=&end_date=&inventory_output=0&rdb_inventory_output=file&date_format=YYYY-MM-DD&rdb_compression=file&qw_sample_wide=0&list_of_search_criteria=station_type_cd)

If the link doesn't work directly, copy it via mouse click and paste it into the Internet Explorer browser.

### **Historic daily stream water quality data**

Daily values for water-quality data exist for stations with real-time water-quality data. About 47 such stations exist--their real-time data are presented at [http://waterdata.usgs.gov/tx/nwis/current?type=quality&group\\_key=basin\\_cd](http://waterdata.usgs.gov/tx/nwis/current?type=quality&group_key=basin_cd). However, historic data for daily-water-quality values currently are not presented online. By the end of 2005, the USGS is scheduled to present online values for historic daily water-quality data. These data would include dissolved oxygen, pH, water temperature, and specific conductance for about 200 stream sites. Much of the data will represent daily-mean values but some will represent once-daily values for data collected at specific times each day.

The daily values for specific conductance can be used to estimate daily-mean values and daily loads for dissolved solids and other inorganic-chemical constituents. The calculations are based on statistical relations between values for specific conductance and the other constituents, both of which are available as periodic water-quality data. Values for specific conductance are highly correlated with the values for dissolved solids and inorganic constituents. Therefore, daily specific conductance values can be used; along with the statistical relations between values of specific conductance and those for the other constituents; and along with daily streamflow discharge data, to estimate daily-mean concentrations and daily loads for dissolved solids and inorganic chemical constituents. Values for daily streamflow and streamflow periodic water quality can be obtained as explained above.

Additionally, the USGS has developed regression equations relating values for specific conductance to those for dissolved solids and other constituents, and used the approach described above to estimate daily and monthly values for dissolved solids and other constituents—those values have been published in the USGS annual data reports entitled "Water Resources Data, Texas, 19XX". These annual data reports are online at <http://water.usgs.gov/pubs/wdr/#TX> since 1998 but are available in hard copy only prior to 1998.

### **Historic periodic groundwater quality data**

The primary Web page for these data is <http://waterdata.usgs.gov/tx/nwis/qw>.

Click on: "samples" link; the box next to "site type" link; "submit"; then "ground water" to obtain these data. Below is a link to an inventory of about 2,870 wells with analyses of periodic water-quality data. The inventory is sorted by well number within a sort by county name. Several options and methods are available for retrieving data by site, site and parameter group, site and parameter, parameter groups, dates, or via other options.

[http://nwis.waterdata.usgs.gov/tx/nwis/qwdata?station\\_type\\_cd=\\_\\_\\_\\_\\_Y\\_\\_\\_\\_\\_&format=station\\_list&sort\\_key=site\\_no&group\\_key=county\\_cd&sitefile\\_output\\_format=html\\_table&column\\_name=agency\\_cd&column\\_name=site\\_no&column\\_name=station\\_nm&column\\_name=lat\\_va&column\\_name=long\\_va&column\\_name=state\\_cd&column\\_name=county\\_cd&column\\_name=alt\\_va&column\\_name=huc\\_cd&begin\\_date=&end\\_date=&inventory\\_output=0&rdb\\_inventory\\_output=file&date\\_format=YYYY-MM-DD&rdb\\_compression=file&qw\\_sample\\_wide=0&list\\_of\\_search\\_criteria=station\\_type\\_cd](http://nwis.waterdata.usgs.gov/tx/nwis/qwdata?station_type_cd=_____Y_____&format=station_list&sort_key=site_no&group_key=county_cd&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&column_name=alt_va&column_name=huc_cd&begin_date=&end_date=&inventory_output=0&rdb_inventory_output=file&date_format=YYYY-MM-DD&rdb_compression=file&qw_sample_wide=0&list_of_search_criteria=station_type_cd)

[ut=file&date\\_format=YYYY-MM-DD&rdb\\_compression=file&qw\\_sample\\_wide=0&list\\_of\\_search\\_criteria=station\\_type\\_cd](#)

If the link doesn't work directly, copy it via mouse click and paste it into the Internet Explorer browser.

## **Appendix 2 – TCEQ Surface Water Quality Monitoring Data**

Information in the database includes surface water quality monitoring (SWQM) data stored in the TCEQ Regulatory Activities and Compliance System (TRACS) database, finished drinking water quality data in the TCEQ's Water Permits and Resource Management databases, CRP databases, volunteer monitoring programs, and/or other quality assured data. Data used in the assessment must meet clearly defined acceptance and time line criteria established by the TCEQ (refer to most recent revision of Methodology for Developing the Texas List of Impaired Water Bodies). In addition to SWQM data collected by the TCEQ, the TRACS database contains quality-assured data from other state and federal agencies, river authorities, cities, and other monitoring groups. State agencies include the Texas Department of Health and the Texas Parks and Wildlife Department. Federal agencies include the USGS and the International Boundary and Water Commission. These data are collected using methods consistent with the Surface Water Quality Monitoring Procedures Manual (TCEQ, 1999a). SWQM data are collected at fixed stations during routine monitoring and from many other sites selected for special studies and intensive surveys.