

THE CLEARWATER SOURCE

2004 Annual Newsletter

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CUWCD Directors & Terms:

- Leland Gersbach**—Precinct 1
2004-2008 (Secretary)
- Horace Grace**—Precinct 2
2002-2006 (President)
- Wallace Biskup**—Precinct 3
2004-2008 (Vice President)
- Judy Parker**—Precinct 4
2002-2006 (Director)
- Ricky Preston**—At large
2002-2006 (Director)

**CUWCD Public Advisory
Committee:**

- Vince Cortese**—Precinct 1
- Sara Mackie**—Precinct 2
- Marvin Green**—Precinct 3
(Committee chair)
- John Mayer**—Precinct 4
- David Cole**—At Large

INCUMBENT CLEARWATER DISTRICT BOARD MEMBERS STAY IN OFFICE

Clearwater Underground Water Conservation District directors Leland Gersbach and Wallace Biskup both will continue as directors for a four-year term after they were unopposed for re-election in May. Gersbach, who represents Precinct 1, is secretary and has served on the board of directors since 2002. Biskup, who represents Precinct 3, is vice president and has served since 1999.

The board's five members are elected by the voters of Bell County for four year terms. Gersbach and Biskup were elected in 2002 for a two-year term to allow the director terms to be staggered.

The District observes the same precincts as Bell County Commissioners. Four board members each represent a precinct and one is an at-

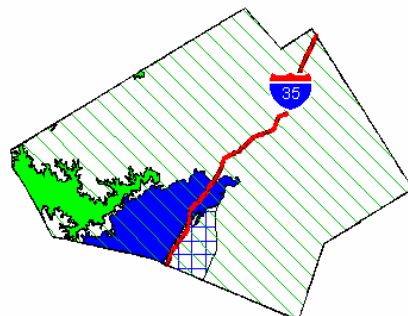


large position. Precincts 2, 4, and at-large serve the same term, whereas precincts 1 and 3 serve the same term. Elections are held in May in even numbered years.

The Board of Directors sets policy. Day-to-day operations are managed by staff members of the Central Texas Council of Governments.

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DISTRICT STUDYING AQUIFER PUMPING



<p>TRINITY</p> <p>■ OUTCROP</p> <p> DOWNDIP</p>	<p>EDWARDS (BFZ)</p> <p>■ OUTCROP</p> <p> DOWNDIP</p>
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The Clearwater District has asked an engineering firm to study recent state data to find out how much water can be pumped from the Edwards (BFZ) aquifer before springs and creeks go dry. Results of the study will help the District ensure that adequate water remains for the springs and Salado Creek to flow. The District expects to set production limits on the Edwards (BFZ) as a result of the study of the state's Groundwater Availability Model (GAM) completed at the end of 2003.

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Outcrop: The part of an aquifer that appears at the land surface.

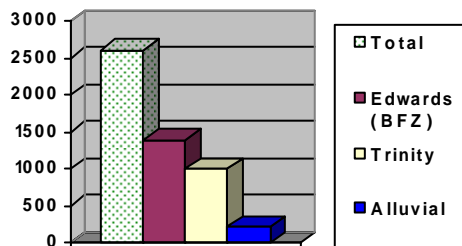
Downdip: The part of an aquifer that dips below other rock layers.

WELL PRODUCTION/REGISTRATION REPORT

The District has permitted 52 non-exempt wells and requires production from these wells to be reported on a monthly basis. Of these, 24 are producing from the Edwards (BFZ) aquifer, 20 from the Trinity aquifer, and 8 from other groundwater sources.

Permitted water wells produced 1,019 acre-feet* of water in the first six months of 2004. This is actually down slightly from the same period in 2003, when production was reported for only 41 wells totaling 1,205 acre-feet. By the end of 2003, production was reported for 43 wells. These permitted wells produced a total of 2,608 acre-feet of water in all of 2003.

2003 Production from Permitted Wells
Acre-feet



*One acre-foot of water will cover one acre of land to a depth of one foot (325,851 gallons). That's roughly the amount of water used by 5 people in a year.

2004 Production from Permitted Wells
January through June

Edwards (BFZ):	607 acre-feet
Trinity:	378 acre-feet
Other:	34 acre-feet
Total:	1,019 acre-feet

All wells are required to be registered with the District. A total of 4,213 wells have been registered through June 2004. Most of these are exempt from permitting and the vast majority, some 3,961 wells, existed prior to the District's rules. About 252 wells have been drilled since February 1, 2002, when the District's rules went into effect.

DISTRICT OFFERS WATER QUALITY TESTS FOR WELL OWNERS

In March of 2004, the District began offering water quality tests aimed at private well owners who want to identify bacteria and impurities.

Water sampling bottles may be obtained from the District office and must be returned refrigerated or on ice within 24 hours after collection. Full information on how to collect the sample can be obtained from the district office or website (www.clearwaterdistrict.org). This service is offered to registered well owners free of charge.

The tests detect coliform bacteria, alkalinity, total dissolved solids, fluoride, hardness, nitrate/nitrite, pH, phosphate and sulfate. Common natural impurities include magnesium, calcium, chlorides, arsenic, boron, selenium and radon. Whether they pose a problem depends on the amount of the substance present.

Groundwater is often polluted as a result of unplugged abandoned wells, improper use of fertilizers and herbicides, poorly maintained septic systems, leaking or abandoned underground storage tanks and piping, and



Water testing kit

storm-water drains that discharge chemicals into the groundwater.

BELL COUNTY AQUIFER LEVELS EXPECTED TO FALL

Water levels in the Trinity have been declining and are expected to continue to do so because of limited recharge in Bell County, according to an engineering study done for the District. The Trinity aquifer outcrop has low permeability, which thwarts recharge.

The study was conducted by engineering firms Turner, Collie & Braden, Inc. and LBG-Guyton Associates in 2001.

Edwards water levels have remained fairly constant with discharge equal to recharge. Still, water levels may start to

decline as well pumping increases, unless recharge is augmented. Natural recharge of the Edwards can be augmented through brush control and dams.

Groundwater resources in Bell County include portions of the Edwards (BFZ) and the Trinity aquifers. Both of these are considered major aquifers.

The Edwards (BFZ) aquifer is located in the southern part of the county and serves as the water supply for Salado, Bartlett, and other communities in the area. The outcrop is generally found to the west of I-35 and

the downdip is generally to the east of I-35.

The Trinity aquifer underlies all of Bell County and lies below the Edwards (BFZ). Southwestern Bell County contains a fraction of the Trinity aquifer outcrop, while the remainder of the county is over the downdip portion of the aquifer. Communities in northern Bell County rely on the Trinity groundwater as a supplemental water supply.

DISTRICT ADOPTS NEW OPERATING RULES

The District adopted revised rules in February that went into effect on March 1, 2004. The revisions were made to help the district better manage limited groundwater resources; protect aquifer quality and quantity; protect water users; and prevent interference between wells. Some of the highlights include:

Historic & Existing Use Permits: Owners of existing permitted wells may convert their grandfathered use to a historic & existing use permit. This protects their right to withdraw an annual volume of water equal to the maximum volume withdrawn in any one year since 1972.

Permit Exemptions: Wells are exempt from permitting if they:

1. Cannot produce more than 25,000 gallons per day; and
2. Are used for domestic, live-stock or poultry purposes; and
3. Are located on a tract of land larger than 10 acres.

Wells located on smaller tracts may still be exempt if the tract existed in this size prior to March 1, 2004 and no subdivision occurs prior to drilling the well.

All wells must be registered with the District prior to drilling.

Spacing Requirements: New wells must be located at least 50' from the property line and 100' from other wells. A minimum tract size of 2 acres is required to drill a new permitted well. For permitted wells, the minimum tract size and setbacks increase as the column pipe size increases.

Management Zones: Management Zones may be established to allow different policies in various areas of the county. The District may impose well production limits on permitted wells if aquifer levels fall. Historic & existing use permits have priority over new operating permits.

Water Quality Rules: A check valve must be installed on all wells that have a chemical injection or foreign substance unit in the water delivery system.

Hydrogeologic Report: This report is required for new wells capable of producing more than 1 million gallons per month.

The District Rules are available on the CUWCD website: www.clearwaterdistrict.org.

WATER CONSERVATION TIPS

It is important for us all to do our part to protect our water resources to ensure adequate water remains available in the future. The following tips are methods to conserve water and protect water quality:

- Install water-saving devices on showers, sinks, and toilets.
- Turn off water when brushing teeth and shaving. Repair leaks immediately.

-Only water once every five days and water thoroughly—1 to 2 inches to encourage deep root growth.

-Water in the early morning or evening hours.

-Use a sprinkler with large water drops instead of a mist—do not water on windy days.

-Mulch trees and plants to retain moisture and prevent evaporation.

-Use water-wise plants for landscaping.

-Plug wells that are deteriorated; cap wells that are in good condition but not in use.

-Limit the use of fertilizers - apply compost to lawn and other vegetation to improve moisture retention and promote plant growth without fertilizers.

-Use "environmentally safe" products such as phosphate-free detergents.

LEGISLATURE EXPECTED TO REVIEW RULE OF CAPTURE

Water issues are expected to figure prominently in the 2005 legislative session. The Legislature will consider an influential report from the Senate Select Committee on Water Policy, including its subcommittee on the Lease of State Water Rights.

That report is likely to prompt discussion on the Rule of Capture. The century-old Rule of

Capture allows property owners to pump from wells on their land all the water they can put to beneficial use without liability, provided there is no willful waste, malice or subsidence.

Groundwater conservation districts provide a counterbalance to the Rule of Capture. They can set well spacing requirements and pumping limits so water production does

not interfere with that on another property. These rules help districts to protect private water rights.

The Select Committee was charged with studying the Rule of Capture, role of groundwater conservation districts, historic use standards and conjunctive use of ground and surface water resources.

UPCOMING EVENTS

Don't miss our annual **Water Symposium** scheduled for **October 27, 2004** at the Bell County Expo Center in Belton. Topics include:

- Rule of Capture and other 2005 legislative issues;
- Groundwater availability in Bell County;
- Surface water projects;
- Water quality projects;
- Rainwater harvesting.

Also coming this Fall:
Well Plugging Demonstration

Texas is the only Western state that continues to uphold the rule of capture.

Clearwater Underground Water Conservation District

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www.clearwaterdistrict.org

Aquifer Monitoring Sites Needed

Help us collect data on the aquifers—contact our office if your well is available as a monitoring site.

Abandoned Wells

Plugging an abandoned well is the landowner's responsibility.

An open or deteriorated well provides a direct conduit for contaminants at the surface to enter the groundwater system below. There is no opportunity for contaminants to filter out through the soil.

Open wells also provide a safety hazard at the surface to both humans and animals.



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Incumbents Stay

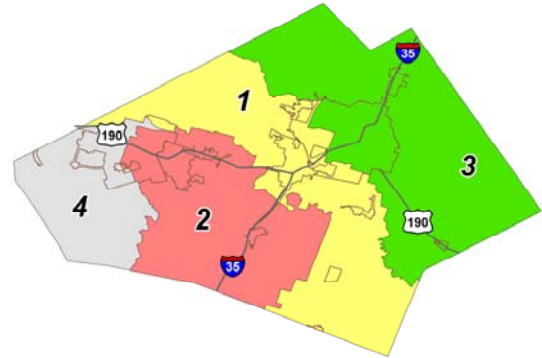
The Clearwater District is responsible for managing groundwater in Bell County.

The District's mission is to develop and implement an efficient, economical, and environmentally sound groundwater management program to protect and enhance the water resources of the district.

The District is responsible for:

- Registering wells
- Granting drilling and operating permits
- Monitoring aquifer levels
- Regulating production from permitted (non-exempt) wells as needed

Each Director appoints a member to the Public Advisory Committee (PAC). The PAC provides input and recommendations to the Board and acts as a liaison to the public on water-related issues.



CUWCD Precincts follow the same boundaries as those for Bell County Commissioners.

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District Studying Aquifer Pumping

The study is being conducted by Turner, Collie & Braden, Inc. Preliminary results indicate that the Edwards (BFZ) may be able to sustain an annual pumpage near 10,000 acre-feet during a year of average rainfall; however, during a year of drought similar to the drought of record in 1954, the aquifer may only sustain an annual pumpage

near 5,000 acre-feet. This supports previous studies that indicate the Edwards (BFZ) recharges quickly and fluctuates with changes in rainfall.

TCB will continue to refine these figures and provide the District with a recommended production figure and strategy.

More info on the GAM may be found on the TWDB website: www.twdb.state.tx.us/GAM.

DISTRICT PROGRAMS AND ACTIVITIES

The District protects and manages the underground water resources of Bell County through regulation, education and conservation promotion. Some of the District's programs and activities include:

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| • Aquifer Studies | • Water Quality Testing |
| • Aquifer Level Measurements | • Major Rivers Water Education Program for Schools |
| • Annual Water Symposium | • Conservation Literature Packets & Bookcovers to Schools |
| • Earth Day Event Sponsor | • Newspaper Articles on the Water Cycle and Aquifers |
| • Resource Library for Public Use | • Annual Essay/Poster Contest on Water Conservation |
| • Public Advisory Committee | • District Web Site at www.clearwaterdistrict.org |

(POSTAGE STAMP)

(NAME)
(STREET)
(CITY)