Prairielands eLine

Prairielands Groundwater Conservation District www.prairielandsgcd.org

Evolution of Groundwater Law in Texas - Part 1

Annually, groundwater professionals from across the state gather at the Texas Groundwater Summit conference to discuss and learn about new developments in the groundwater arena. This year's attendees had the opportunity to hear about the evolution in the law that governs groundwater decisions in our state.

With 35 years on the bench of the Texas Supreme Court, the speaker, Chief Justice Nathan L. Hecht, is in a unique position to relate this history; he was serving on the court when a number of the cases that have come to define groundwater law were decided.

In Texas, our groundwater law is based on "the rule of capture." This concept has its roots in English common law. Basically, common law is a method of developing law through court decisions. The law evolves slowly over time by taking each case that is filed,



looking at previous court decisions on similar matters and determining the current case based on how those previous cases were decided. Decisions tend to maintain a consistency through the years.

The case that historians point to as establishing the rule of capture actually occurred in England in 1843 – Acton v. Blundell in which the deciding court determined that the person that owns the land surface could dig and use anything he finds there to his own purposes. Draining the groundwater under his neighbor's prop-

erty or intercepting the surface water is not actionable.

In Texas, the first deciding case in groundwater, the one that linked its path to English common law and the rule of capture, originated in Denison and is known as Houston & Texas Central Railroad Co. v. East in 1904.

In the case, Mr. East had a shallow water well on his property that went dry after the railroad drilled a deeper well on their neighboring property and started pumping

See EVOLUTION, p 2

Winter 2017

Volume 4, Issue 1

Inside this issue:

Rotary Club Presentation	2
Upcoming Board Meetings	3

Leak Detection 3

Holiday Water 4 Conservation

Special points of interest:

- Texas groundwater law is based on "the rule of capture."
- General Manager updates Cleburne Rotary Club members on district activities.
- Next board meeting set for January 15.
- Unaccounted for water losses can mean financial losses to water providers.
- Hand-washing holiday dishes can use more water than your dishwasher.

Conkwright presents to Cleburne Rotary Club

Jim Conkwright, general manager of the Prairielands Groundwater Conservation District, was the lunch time speaker for the Cleburne Rotary Club on Thursday, September 21, 2017. Prairielands, with administrative offices in Cleburne inside the renovated Liberty Hotel, is the groundwater conservation district for the four-county area including Johnson, Ellis, Hill, and Somervell counties.

Conkwright discussed the district's formation by the four counties and its creation by the 81st Session of the Texas Legislature in 2009. The district was created to keep groundwater management in local hands and each county maintains two seats on the district's Board of Directors.

Initially, the district focused its attention on collecting information on area aquifers (the Trinity Group and Woodbine aquifers) and developing up-to-date computer models based on the best available science to provide the most accurate and relevant projections for groundwater management.

With these steps completed, today, the district is continuing to add to the body of knowledge about this mostly hidden resource by establishing a network of monitor wells strategically located across the four-county area. Concurrently, the Board of Directors is in the process of crafting rules and regulations for the management of groundwater in the district to conserve resources, and prevent its waste and contamination. At the same time, the board is keenly aware of its duty to protect the landowner's investment-backed expectations and private property rights.

In 2017, the Board held a public hearing regarding minimum tract size. As a result, the Board passed a two-acre minimum tract size rule for new water well installations in the district. This rule was quickly adopted by Johnson and Somervell counties. (Ellis County already requires a minimum tract size of three acres and Hill County is considering a two-acre or larger minimum tract size.)

Studies show that under current circumstances if a minimum tract size of one acre was maintained, 65% of water wells could encounter problems within the next five years. By increasing the minimum tract size to two acres, the percentage of wells that could face water shortages was reduced to 20% or less.

In addition, Conkwright explained that the district is active in the community promoting public awareness of groundwater issues such as water conservation and protection through the development and deployment of a 36-foot long water educa-



Prairielands GCD General Manager Jim Conkwright updates members of the Cleburne Rotary Club district activities.

tion trailer known as the "WET."

The WET currently contains five different learning stations including an interactive, functioning aquifer model, a home water conservation exhibit, and a model of a water well. The WET makes appearances at schools, community functions, and public events at no cost to the teacher, students, or event sponsor.

Mr. Conkwright concluded his talk by inviting club members to get involved with the district by attending the district's monthly board meetings, serving as directors for their county as the need arises, or by requesting the WET at local events.

Trailer reservations can be made and Mr. Conkwright can be reached at the district offices at (817) 556-2299.

EVOLUTION, continued from page 1

large amounts of groundwater.

When Mr. East sued, the Texas Supreme Court ruled in favor of the railroad with the finding that a person who owns the land may drill a well and use the water from that well even if such use causes his neighbor's well to go dry.

The court's reasoning at the time

included (1) that the origin, existence, and movement of underground water was unknown and to try and determine such was practically impossible and (2) to decide otherwise was to stand in the way of progress and economic development from which all would benefit.

Although this explanation is greatly simplified, this is the basis for subse-

quent groundwater decisions in Texas (one of the few states that still uses the rule of capture).

In the next issue of the *eLine*, we'll look at another early action that helped shape the state of our current groundwater law: the 1917 Conservation Amendment to the state constitution.

Page 2 Prairielands eLine

Did You Know ...?

The Prairielands Groundwater Conservation District Board of Directors holds regular monthly board meetings which are open to the public.

Meetings are normally scheduled for the 3rd Monday of the month in the Board Room of the Liberty Hotel, 205 S. Caddo St., Cleburne, TX, 76031. (Board meetings that fall on a holiday are scheduled for an alternate date.)

The Board's Work Session typically begins at 8:30 a.m. with the actual Board Meeting following immedi**Upcoming Board Meeting Dates**

January 15, 8:30 a.m. February 20*, 8:30 a.m. March 19, 8:30 a.m.

Liberty Hotel Board Room 205 S. Caddo Street Cleburne, TX 76031

*3rd Tuesday

ately after. As mentioned before, both are open to the public, however, certain restricted topics may be discussed by directors only during a closed Executive Session.

Meeting notices and agendas are publicly posted prior to the date of the meeting at the PGCD office and on the district's website at www.prairielandsgcd.org.

The next regularly scheduled Board of Directors meeting is set for Monday, January 15, 2018, at 8:30 a.m.

When Lost Water = Lost Revenues

Water suppliers do all they can to provide a constant stream of clean, safe drinking water to our homes and businesses. But when something goes awry, and that water doesn't successfully reach the intended customer, the water provider may be leaking more than water. Their revenue may also be seeping away.

Water can be lost through leaks, breaks, waste, and even theft when someone tampers with supply lines or meters. Losses can be identified by water providers by implementing an ongoing leak detection program using equipment that either "listens" for leaks in their supply lines or measures water flow. Audits may also identify losses due to errors in accounting, or reading and recording water system flow meters incorrectly.

To assist water utilities in the state in reducing water losses, the Texas Water Development Board



A water supply employee listens for leaks on a water main via a fire hydrant.

(TWDB) has leak detection equipment that utilities can borrow. This equipment may be used to locate leaks on main lines, valve boxes, and fire hydrants. Equipment can be borrowed for 30 days at a time and for as many times in the year as needed (and available). Borrowing the equipment is free, however, a utility must prepay the cost of return shipping.

This program provides acoustical leak detection and ultrasonic flow meter testing equipment to help utilities identify leaks and determine flow rates. Its technology filters out unwanted sound frequencies that would otherwise prevent the pinpointing of leaks.

Details about the loan program and the forms needed to borrow equipment are available on the agency's website at http://www.twdb.texas.gov/conservation/municipal/waterloss/leak-detection.asp.



Another utility employee uses acoustical leak detection equipment on a water valve.

Volume 4, Issue 1 Page 3



Conserving, protecting, and enhancing groundwater resources in Ellis, Hill, Johnson, and Somervell counties

> Mailing Address: PO Box 3128 Cleburne, TX 76033

Phone: 817-556-2299

Office Location: 205 S. Caddo Street Cleburne, TX 76031

We're on the web at prairielandsgcd.org.



In 2008 & 2009, the Texas Commission on Environmental Quality designated large areas over the Trinity Aquifer from the Red River to Central Texas as Priority Groundwater Management Areas (PGMA) due to critical groundwater declines facing the area.

The Prairielands Groundwater Conservation District was created in 2009 by the 81st Texas Legislature with a directive to conserve, protect and enhance the groundwater resources of Ellis, Johnson, Hill and Somervell Counties in Texas.

Happy Holiday Dishes



So you're going to have the family over for a holiday meal or snacks and drinks. Besides the all-important menu, preparation will include deciding on dinnerware and utensils for the event – paper or reusable, extra garbage or washing up after.

Paper and plastic may be the answer for saving time better spent with family. However, cleaning up dishes afterwards and sharing leftovers with family members may be part of your holiday memories and routine. And using reusable plates and utensils will save you both money and water in the long run.

Hand-washing vs. Dishwasher
Studies have shown that dishwashers, especially those with the
Energy Star™ rating, use less
water to clean a full load of
dishes than doing them by hand.
Energy Star™ dishwashers use
between four and six gallons of
water per load depending on the
cycle selected. Four gallons of
water in a standard-sized sink

doesn't get you very far when hand-washing a lot of dirty dishes, pots, and pans. And as for rinsing, every minute of water you run from the tap, two gallons are going down the drain.

Water Conservation Tip: If washing dishes by hand is necessary, wash them inside the largest pot you've used to cook your meal (like your turkey roaster). Rinse everything at once by starting with the largest pot. Put clean water in it to rinse the rest of the dishes.

For more information about water conservation, see the Prairielands Groundwater Conservation District website at www.prairielandsgcd.org.