

New legislation seeks to curtail regulation of groundwater withdrawals for oil and gas projects

[Romany Webb](#)

March 11, 2015

As the drought enters its fifth straight year, policy makers across Texas are looking at new ways to encourage water conservation by industrial and other users. Just last month, at a joint hearing of the House Natural Resources and Energy Resources committees, state legislators emphasized the need to [reduce water use in oil and gas development](#). Not everyone, however, agrees that developers' access to water should be limited. On the contrary, two legislative proposals currently before the House of Representatives would actually make it easier for developers to withdraw groundwater. If enacted, the legislation would restrict the ability of local water managers to regulate withdrawals, potentially leading to the over-extraction of groundwater.

The use of water in oil and gas development has received growing attention in recent months, primarily due to the expansion in hydraulic fracturing (fracking), whereby fluid is injected underground at high pressure to fracture the rock to release hydrocarbons. As [previously reported](#), the fracking fluid is comprised principally of water, though the amount required varies depending on local conditions. Overall, the [World Resources Institute](#) estimates that fracking accounts for roughly 0.5 percent of water use in Texas. This percentage can, however, be significantly higher in some areas. In the Barnett Shale play, for example, Johnson County diverts approximately [one-third](#) of its water to gas development. In La Salle County in the Eagle Ford Shale, gas development is expected to use [40 percent](#) of the available water by 2020.

Currently, most fracking operations use freshwater, often taken from underground aquifers. ([As previously reported](#), while some operators have recently begun using recycled water for fracking, such use is remains limited). The taking of groundwater is, with some exceptions, subject to the rule of capture outlined by the Texas Supreme Court in *Houston Texas Central Railroad Company v. W.A. East*, 98 Tex. 146 (1946). Under that rule, a landowner can withdraw an unlimited amount of groundwater from below his/her land, provided only that he/she do not have malicious intent, trespass on neighboring property, contaminate others' wells, cause land subsidence, or willfully waste groundwater. Except in these situations, the landowner is not liable if his/her withdrawal causes groundwater wells on neighboring properties to run dry.

Concerned that the rule of capture may lead to over-extraction of groundwater, the Texas legislature has authorized the establishment of [groundwater conservation districts](#) to manage significant aquifers. Statewide, there are currently 98 groundwater conservation districts. [Texas Water Code, § 36.101\(a\)](#) authorizes each district to make and enforce rules for the conservation, preservation, protection, and recharge of groundwater in their local area.

Under [Texas Water Code, § 36.113\(a\)](#), each groundwater conservation district must establish a regime for permitting the construction of wells used to take groundwater. In crafting their permitting regimes, the districts must comply with state legislation. In [Texas Water Code, § 36.117](#), the state legislature identified several categories of water wells for which districts cannot require a permit. These include wells "used solely to supply water for a rig that is actively engaged in drilling or exploration operations for an oil or gas well permitted by the Railroad Commission of Texas." The term "drilling or exploration operations" is not defined in the legislation, creating uncertainty regarding the scope of the permitting exemption.

Traditionally, the exemption had applied to water use in conventional drilling activities (e.g., the use of water to soften clay and other materials to make drilling easier). As the exemption was introduced before the rise in unconventional drilling, it is unclear whether it also applies to water used for fracking. The groundwater conservation districts have expressed differing views on this issue. By way of example, on one side, the McMullen Groundwater Conservation District in the Eagle Ford Shale play views fracking as a drilling technique which is exempt from the permitting regime. On the other side, also in the Eagle Ford Shale, the Evergreen Conservation District has characterized fracking as a production activity separate from drilling. As a result, the district requires wells used to supply water for fracking to be permitted.

Seeking to address this inconsistency, two bills clarifying the exemption's scope have been introduced into the House of Representatives this session. [House Bill 1972](#), introduced by Rep. Keffer on February 26, would amend § 36.117(b)(2) of the Water Code to expressly state that a groundwater conservation district cannot require a permit for a well "used to supply water for drilling or exploration operations, including completion operations, for an oil or gas well." Thus, the amendment would make clear that a permit cannot be required for wells supplying water to be used in fracking. That is also the effect of [House Bill 2132](#), which was introduced by Rep. Craddick on March 2. Specifically, the Craddick bill would amend the Water Code to clarify that a permit is not required for any well "used to supply water for operations related to oil and gas exploration, development, or production, including hydraulic fracturing or drilling, completing, recompleting, stimulating, reworking, or deepening an oil or gas well."

This type of legislative action has been opposed by [environmental groups](#), which raise concerns that exempting water wells used in fracking from permitting could lead to the over-extraction of groundwater. In response, [industry groups](#) assert that fracking uses relatively small amounts of groundwater, making permitting unnecessary. True, there may be little risk to resources in some areas, where fracking is limited and/or there are few other demands on groundwater. However, in areas experiencing significant water demand for fracking and/or other activities, over-extraction is a very real possibility. Thus, there is a need for greater flexibility to enable the tailoring of groundwater regulation to local conditions. Recognizing this, last session, the Senate approved [legislation](#) giving groundwater conservation districts the option of requiring permits for water wells used in fracking or exempting such wells from permitting. Unfortunately however, the legislation stalled in the House of Representatives. Perhaps it is time the House took another look.

[drought](#)
[energy](#)
[fracking](#)
[groundwater](#)
[groundwater conservation district](#)
[oil and gas](#)
[permitting](#)
[Texas Supreme Court](#)

Leave a Reply

Your email address will not be published. Required fields are marked *

Name *

Email *

Website

Comment

The KBH Energy Center blog is a forum for faculty at The University of Texas at Austin, leading practitioners, lawmakers and other experts to contribute to the discussion of vital law and policy debates in the areas of energy, environmental law, and international arbitration. Blog posts reflect the opinions of the authors and not of The University of Texas at Austin or the KBH Energy Center.

Popular Tags

Texas (54)

water (46)

energy (19)

drought (17)

fracking (14)

natural gas (13)

endangered species (12)

groundwater (8)

climate change (8)

oil and gas (8)

court cases (7)

epa (6)

conservation (5)

pollution (5)

TCEQ (5)