



Groundwater in Texas: Policy Recommendations for the 83rd Legislative Session

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Executive Summary

As the 2013 legislative session opens, water is on the minds of policymakers, media and the public. Drought continues to haunt many areas of Texas, water battles between municipal and agricultural interests are heating up, and discussion about allocating state funding to water supply projects is intensifying. Declining lake levels and dry riverbeds are obvious to everyone, and thus much of the attention has been focused on the state's surface water resources. But, looming in the background are difficult legal and management issues regarding groundwater.

Groundwater already accounts for about 60 % of total water use in Texas. Sensible management of this resource is critical to the present and future economy. Moreover, flows out of groundwater aquifers—through seeps and springs—sustain the flow of rivers and help fill reservoirs in many parts of the state. Withdrawal of groundwater for use by cities, farms, and industries must be balanced against the need to maintain suitable aquifer levels and protect the contribution of groundwater to surface water bodies.

Recent court rulings, however, pose new challenges for efficient and sustainable groundwater management in Texas. In *Edwards Aquifer Authority v. Day*, the Texas Supreme Court held that landowners have an absolute right of ownership in groundwater beneath their land. This ruling raised as many questions as it answered, though it did clearly leave room for management of groundwater resources by local groundwater districts or other government entities. *Day* is not the only case with major potential ramifications for groundwater management. In *Edwards Aquifer Authority v. Bragg*, which is currently on appeal to the 4th Circuit Court of Appeals in San Antonio, a district court found that pecan farmers were entitled to over \$ 730,000 in compensation for regulatory “takings” when the Edwards Aquifer Authority limited the amount of water the farmers could pump.

The full ramifications of these two important legal cases may not be known for some years. In the meantime, however, there are a number of actions that the legislature should consider in 2013 to ensure that groundwater resources in Texas can be managed sustainably and in coordination with the state's surface water resources. Seven recommendations are discussed in this report:

1. **Enact a 2-year delay in the current round of regional water planning.** This delay would allow time for groundwater management areas (GMAs) to develop revised “desired future conditions” (DFCs) that can then be fully integrated into the planning process.
2. **Establish a Groundwater District Enhancement Fund.** This fund could be established with additional funds currently being proposed for the next two years of the regional water planning process. It could be managed by the Texas Water Development Board and used to assist groundwater districts with developing the science needed for development of DFCs and revisions of district management plans.
3. **Direct state agencies to significantly expand their efforts to characterize and model the interconnection of groundwater and surface water areas of the state with significant known interconnection.** While some research and model development has been carried out by the Texas

Water Development Board to characterize ground water and surface water interaction, much more needs to be done to equip decision-makers with the appropriate tools for scientifically sound management of our limited water resources.

4. **Ensure that existing surface water rights are protected in decisions regarding groundwater management and permitting.** While the Texas Water Code does currently provide groundwater managers with some discretion to consider the effects of their decisions on surface water resources in general, there are few provisions that ensure ground water management districts will consider the potential adverse effects of their decisions on existing surface water rights and minimize those effects. As groundwater use increases, protection of surface water rights that depend on flows from springs and seeps will become increasingly important. Through amendments to Sections 36.1071(a)(4), 36.108(d)(4) and 36.113(d)(2), the Legislature should direct groundwater conservation districts located in areas where there is significant contribution of seeps and springs to surface flow to avoid adverse effects on surface water rights when developing management plans and desired future conditions and when issuing new groundwater pumping permits.
5. **Protect current groundwater district management authority.** In light of the potential increase in “takings” actions against groundwater districts that may be generated by the holdings in the *Day* and *Bragg* cases, the Legislature should ensure that groundwater districts maintain their current statutory authority against attack from entities that may seek to pump and export large amounts of groundwater from rural areas to cities. The key elements of that authority, especially after *Day*, are: (1) the ability of districts to issue pumping permits for limited terms, subject to review and renewal and (2) the ability to adjust conditions on existing permits as new pumping permits have to be issued. In addition, current law appropriately provides that groundwater districts may recover attorneys’ fees when they win a lawsuit brought against them.
6. **Protect groundwater recharge.** Aquifers in some areas of the state are recharged via surface water flows. While current law requires the Texas Commission on Environmental Quality (TCEQ) to consider the impact on groundwater when issuing a new or amended surface water right, TCEQ rarely has the information it needs to do a meaningful evaluation. Section 11.151 of Texas Water Code should be amended to require that any application for significant new or amended surface water right permits or for an inter-basin transfer include a study of the potential impacts on groundwater recharge.
7. **Clarify the distinction between underflow and groundwater.** Chapter 11 of the Water Code defines state water to include the “underflow . . . of every flowing river, natural stream and lake . . .” However, current law and TCEQ rules should be clarified to ensure that the public interest in underflow is not adversely affected by groundwater permitting decisions and to enhance coordination between TCEQ and groundwater districts in dealing with underflow.