TEXAS LIVING WATERS PROJECT

TEXAS GROUNDWATER AND THE RULE OF CAPTURE

Issue Paper

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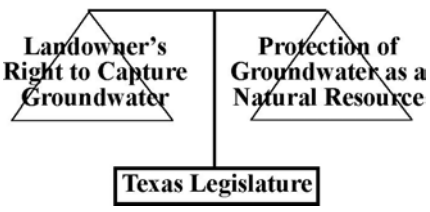
The population of Texas is expected to double by 2050, with the bulk of the growth occurring within and around the major urban centers of the state. With this growth will come increasing pressure on the state's groundwater supplies as the larger urban areas seek new sources of water to meet their growing demands. **The prospect of this additional demand has heightened the need to protect rural areas of the state whose groundwater resources are increasingly targeted for large-scale withdrawal and transport to urban areas.** Despite some recent improvements, the overall framework for such protection and for sustainable management of groundwater remains inadequate in Texas.

Texas' guiding principle for groundwater management is the **Rule of Capture**. This rule, which was adopted in 1904, gives each landowner the right to capture an unlimited amount of groundwater by tapping into the underlying aquifer. The landowner is not liable for injury to another adjacent landowner caused by excessive or harmful pumping, other than from subsidence, as long as the effect was not intentional. By relying on this rule, our historical approach has been to exercise little control of groundwater pumping.

Comanche Springs, before unregulated withdrawals depleted the aquifer.

The rule of capture may have been adequate when neighboring landowners were withdrawing similar and limited amounts of water. However, with the threat of large-scale withdrawals of groundwater for export the state needs an effective means of protecting water supplies for rural communities, farming and ranching operations, and the environment itself. Potential consequences of not taking action include the lowering of local groundwater levels, reductions in essential baseflow to rivers and streams, and diminished springflows. The environmental and economic consequences for rural and agricultural communities will be grave if this issue is not addressed.



The legislature should change the law to balance the landowner's right to capture groundwater with the public interest in managing groundwater resources for all users, including the environment, and to ensure that both the present and future needs of the communities dependent upon these resources are accounted for. This necessary balance can be

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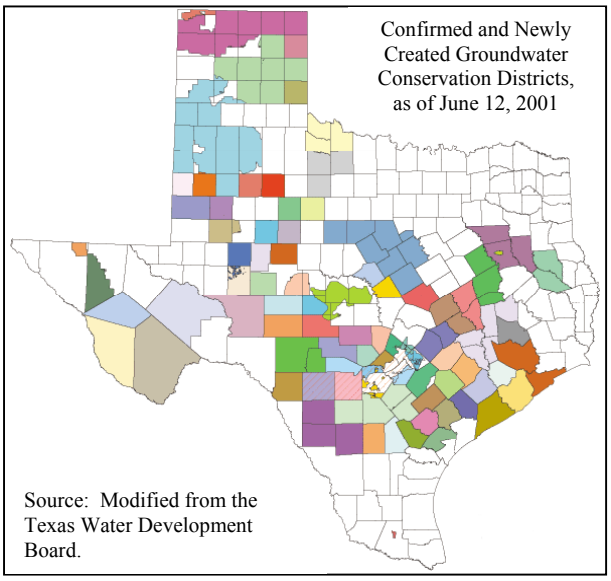
achieved by **adopting for all aquifers in the state a sustainable-yield management goal,** which means that average withdrawals should not exceed long-term recharge**.**
To advance this goal the state **should require that current and future groundwater districts set sustainable-yield caps on pumping and issue permits consistent with those caps.**

In addition, the state should replace the **rule of capture** with a **reasonable use doctrine** as the basis for groundwater management. Essential elements of the reasonable use doctrine are:

1) each landowner is restricted to reasonably exercising his or her right to capture water, in view of the similar rights of his or her neighbors; and
2) if the groundwater is to be used at a location other than on the overlying land, its withdrawal may not interfere unreasonably with the groundwater use by neighboring landowners.

Finally, the state should encourage the creation of **new groundwater conservation districts** and clarify and **further strengthen their authority**. Districts are essential to the protection of groundwater resources because, in their absence, there is little recourse for the over-exploitation of aquifers under current law. The state has made substantial progress in this direction. As of 2000, 63 groundwater conservation districts covered 37 percent of the state. In 2001, as shown in the figure below, the number of districts grew to more than 80. Empowered with new authority under SB 2, districts are now better equipped to manage groundwater resources within their boundaries. They have clear authority to regulate spacing and production of wells to ensure the avail-ability of groundwater, and they can deny a permit to withdraw groundwater based on the effect it may have on aquifer conditions. The districts can also require a permit amendment and charge a limited fee for an export.



Source: Modified from the Texas Water Development Board.

However, with increasing pressures on groundwater resources, it is important that a district be able to take into account how export of water outside of its boundaries could adversely affect groundwater recharge. In addition, the state needs to do a better job of ensuring that all districts have **sufficient technical and legal capacity and funding** to effectively exercise their authority and responsibility to protect local groundwater resources.

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