

- SUBJECT:** Providing a regulatory framework for aquifer storage and recovery
- COMMITTEE:** Natural Resources — favorable, without amendment
- VOTE:** 8 ayes — Ritter, Ashby, D. Bonnen, Callegari, Keffer, Larson, Martinez Fischer, D. Miller
- 0 nays
- 3 absent — Johnson, T. King, Lucio
- WITNESSES:** For — Steve Kosub, San Antonio Water System; James Dwyer; Ed McCarthy; (*Registered, but did not testify:* Jeff Coyle, City of San Antonio; Billy Howe, Texas Farm Bureau; Kent Satterwhite, Canadian River Municipal Water Authority; Tom Tagliabue, City of Corpus Christi)
- Against — (*Registered, but did not testify:* Myron Hess, National Wildlife Federation; Ken Kramer, Sierra Club - Lone Star Chapter; Luke Metzger, Environment Texas; Lonnie Stewart)
- On — Stacey Steinbach, Texas Alliance of Groundwater Districts; (*Registered, but did not testify:* Jorge Arroyo, Texas Water Development Board; Ron Ellis, Texas Commission on Environmental Quality; Marc Friberg, Roland Ruiz, Edwards Aquifer Authority)
- BACKGROUND:** Aquifer storage and recovery is a way to store drinking water underground in existing aquifer formations. Many aquifer storage and recovery systems pipe drinking water into an aquifer for storage during wet periods. Then, when summer brings peak demands, the water is pumped back out of the aquifer for use.
- DIGEST:** CSHB 3013 would establish a regulatory framework for implementation of aquifer storage and recovery projects. The bill would provide for rules for the administration of projects, and permitting requirements and considerations. The bill also would provide guidance on the regulation of wells in a project area, including registration requirements and fees, as well as for the protection of rights to stored water, eligibility for state funding, and various reporting requirements.

The Texas Water Development Board (TWDB) would be required to develop model rules for the administration of aquifer storage and recovery projects that would be applicable to all groundwater districts in the state.

The bill would require the Texas Commission on Environmental Quality (TCEQ) to expedite the issuance of temporary permits for aquifer storage and recovery projects to determine feasibility of a project. If the project was shown to be feasible, TCEQ would be required to issue a final order granting a permit or an amendment to a permit.

The bill would provide application requirements for a permit authorizing storage of appropriated surface water in an aquifer storage and recovery project. TCEQ would be required to consider certain factors before issuing a permit and could consider relevant facts with respect to groundwater conservation districts with jurisdiction over the target aquifer.

The bill would provide that a well constructed and operated as part of an aquifer storage and recovery project that used surface water would be subject to water rights permitting. Those wells would not be subject to permitting or rules of a groundwater district, but would have to be registered with the district.

An aquifer storage and recovery project operator would meter the volume of water injected and recovered from each well and file a monthly report with the district, as well as an annual report detailing the cumulative amount of water in the project, and a map showing the underground movement of the stored water.

Water in an aquifer storage and recovery project could be stored and recovered from multiple aquifers as long as the storage and recovery was accomplished using injection and recovery wells completed in a single aquifer to prevent cross-contamination of aquifers.

Treated wastewater also could be stored in an aquifer storage and recovery project.

The bill would require TWDB, during the state and regional planning process, to conduct studies and surveys of aquifers in the state, including target aquifers, to determine the feasibility of aquifer storage and recovery projects.

The bill would take effect September 1, 2013.

**SUPPORTERS  
SAY:**

CSHB 3013 would encourage the development of aquifer storage and recovery projects throughout Texas by establishing a legal and regulatory framework that reflects the technical application of this technology. The bill would expedite the permitting process for aquifer storage and recovery projects and clarify the role of groundwater conservation districts in such projects.

Aquifer storage and recovery can provide a significant portion of the storage needed to meet the future demand of water and is resistant to many of the problems associated with storing water above ground in surface water reservoirs, such as adverse environmental impacts, land requirements, high costs, and water losses due to evaporation, transpiration and siltation.

The principal challenges for aquifer storage and recovery in the United States have been the legal and regulatory frameworks which, in many states, have not yet caught up with the technical application of this technology. The same is true in Texas because current regulations and statutes, both statewide and local, do not readily facilitate the maximum beneficial use of either groundwater or surface water for aquifer storage and recovery.

Aquifer storage and recovery has proven to be an efficient and cost-effective method of storing water when it is available. The El Paso Water Utilities, the City of Kerrville and the San Antonio Water System aquifer storage and recovery projects have shown that the technology is feasible using different water supply sources and in different types of aquifers and that the technical aspects of aquifer storage and recovery are not the major factors inhibiting its implementation.

**OPPONENTS  
SAY:**

Further consideration and development of aquifer storage and recovery projects is warranted. If done right, they have a lot of potential for avoiding evaporation loss and environmental damage associated with new reservoirs. However, there are some provisions of the bill that could be problematic.

CSHB 3013 would mandate approval of treated wastewater for injection as part of an aquifer storage and recovery project. Mandated approval would not be appropriate for all projects without consideration to

individual aquifer conditions.

Also, the bill would provide for model rules to be developed by TWDB that would be applicable to all groundwater conservation districts. A “one size fits all” set of model rules to be applied statewide would not be appropriate since aquifers vary so much around the state.

Also, the bill contains broad language about the qualification of aquifer storage and recovery projects for state funding that could allow questionable projects to receive funding.