SUBJECT: Development of brackish groundwater desalination projects

COMMITTEE: Natural Resources — committee substitute recommended

VOTE: 8 ayes — Ritter, Ashby, D. Bonnen, Callegari, Keffer, Larson, Martinez Fischer, D. Miller

0 nays

3 absent — Johnson, T. King, Lucio

WITNESSES: (*On the original bill:*)
For — Steve Kosub, San Antonio Water System; (*Registered, but did not testify:* Teddy Carter, TIPRO-Texas Independent Producers and Royalty Owners Association; Jeff Coyle, City of San Antonio; Hugo Gutierrez, Marathon Oil; Billy Howe, Texas Farm Bureau; Ed McCarthy, FSH Holdings LP; Jason Skaggs, Texas and Southwestern Cattle Raisers Association; Matthew Thompson, Apache Corporation)

Against — Ty Embrey, Multiple groundwater conservation districts - Panola County GCD, Middle Trinity GCD, and Middle Pecos GCD; Mike McGuire, Rolling Plains GCD; Mary Sahs, Kenedy County Groundwater Conservation District; (*Registered, but did not testify:* Dirk Aaron, Clearwater Underground Water Conservation District; Lonnie Stewart)

On — Jorge Arroyo and Robert Mace, Texas Water Development Board; Kirk Holland, Barton Springs/Edwards Aquifer Conservation District; Ken Kramer, Sierra Club - Lone Star Chapter; Stacey Steinbach, Texas Alliance of Groundwater Districts; C. E. Williams, Panhandle Groundwater Conservation District; (*Registered, but did not testify:* Larry French, Texas Water Development Board; Marc Friberg and Roland Ruiz, Edwards Aquifer Authority)

(*On the committee substitute:*)
For — Steve Kosub, San Antonio Water System

On — Kirk Holland, Barton Springs Edwards Aquifer Conservation District; Robert Mace, Texas Water Development Board; Mary Sahs, Kenedy County Groundwater Conservation District

DIGEST:

CSHB 2578 would direct the Texas Water Development Board (TWDB) to identify aquifers or portions of aquifers to be designated as brackish groundwater production zones suitable for the development of large-scale desalination projects, without significantly affecting groundwater availability or groundwater quality in freshwater zones.

Affected groundwater districts would be required to consider brackish desalination strategies in their groundwater management plans. Regional water planning groups would be required to identify opportunities for large-scale desalination projects to meet projected water needs.

Local groundwater districts, by rule, would issue permits for pumping in brackish groundwater production zones for a project designed to treat brackish groundwater to drinking water standards. The rules would:

- allow unlimited withdrawals of brackish groundwater from a designated zone;
- provide a minimum permit term of 30 years;
- require reasonable monitoring;
- allow districts to amend permits if withdrawals caused significant aquifer level declines or an adverse impact to water quality in adjacent freshwater aquifers; and
- require reports from the permit holder to include brackish groundwater withdrawal amounts, water quality of brackish groundwater withdrawn, and aquifer levels in the designated zone and adjacent aquifers.

A district could amend a brackish groundwater permit if the TWDB determined that pumping was causing significant aquifer level declines or adverse impacts to water quality in adjacent freshwater aquifers. If a problem was found, the district could amend the permit to mitigate the problem, approve a mitigation plan that fixed the problem, or a combination of the two.

The bill would take effect September 1, 2013.

SUPPORTERS SAY:

CSHB 2578 would help Texas meet its growing needs for water through desalination of brackish groundwater. An acre-foot of water is 325,851 gallons, and Texas has more than 2.7 billion acre-feet of brackish groundwater below ground. However, this water is too salty to be used for

drinking water and requires treatment for potable use. Desalination is an innovative water technology that has advanced rapidly over the past decade to treat brackish water to drinking water standards. Yet, in the state water plan, desalination accounts for only 3.9 percent of the projected 8.3 million acre-feet of new water needed by 2060.

There are currently 45 desalination plants active throughout Texas. These plants produce about 122 million gallons of water per day — about 137,000 acre-feet of water per year. In contrast, Florida led the nation in number of facilities (140) and daily production (515 million gallons) in 2010. Texas is missing an opportunity and needs to embrace desalination to develop this drought-resistant source of potable water in the absence of rainfall.

This bill would attempt to break down regulatory measures and provide firm access to a long-term supply of water while maintaining local control of groundwater planning and regulation. It would protect existing fresh groundwater supplies and take advantage of TWDB's scientific expertise.

OPPONENTS SAY:

CSHB 2578 would create a "one size fits all" approach that would not be appropriate in managing groundwater resources because aquifers vary so much around the state.

While providing 30-year permits for pumping brackish groundwater with no production limitations would be helpful in the development of large-scale desalination projects, it could be harmful to existing water sources. The bill would provide some safeguards by allowing permits to be amended if significant impacts were determined, but the negative impacts could be irreversible by the time the problem was realized. This would put the groundwater districts in a position of being reactive rather than proactive when balancing the use of the aquifer.

OTHER OPPONENTS SAY:

Little is known about brackish groundwater both geologically and from a policy standpoint, including how property rights and the ownership of groundwater would be affected. Issues with developing brackish groundwater would be best served not by enacting legislation this session but by deferring the topic to an interim study. This would allow input from a diverse but representative group of stakeholders and groundwater districts across the state putting their expertise to work developing a balanced, more informed process.