

SUBJECT: Developing brackish groundwater production zones

COMMITTEE: Natural Resources — committee substitute recommended

VOTE: 10 ayes — Keffer, D. Bonnen, Burns, Frank, Kacal, T. King, Larson, Lucio, Nevárez, Workman

0 nays

1 absent — Ashby

WITNESSES: For — Brian Sledge, Benbrook Water Authority, Lone Star Groundwater Conservation District, North Texas Groundwater Conservation District, Barton Springs Edwards Aquifer Conservation District, Prairielands Groundwater Conservation District; Steve Kosub, San Antonio Water System; Bob Harden, Texas Association of Groundwater Owners and Producers; Darrell Peckham, Texas Desalination Association; Heather Mahurin, Texas Municipal League; Leigh Thompson, Texas Public Policy Foundation; Buddy Garcia; (*Registered, but did not testify:* Chris Miller, Association of Electric Companies of Texas; Corbin Van Arsdale, AGC-Texas Building Branch; Jon Fisher, Associated Builders and Contractors of Texas; Mike Nasi, Balanced Energy for Texas Coalition, Water-Energy Nexus for Texas Coalition; Matt Phillips, Brazos River Authority; Robert Flores, Breitling Energy; Jon Weist, City of Irving; Megan Dodge, City of San Antonio; John Grant, Colorado River Municipal Water District; Larry McGinnis, Exelon Corporation; Jessica Oney, Luminant; Hugo Gutierrez and Amy Maxwell, Marathon Oil Corporation; Parker McCollough, NRG Energy, Inc.; Scott Norman, Texas Association of Builders; Stephen Minick, Texas Association of Business; Patrick Tarlton, Texas Chemical Council; Lindsey Miller, Texas Independent Producers and Royalty Owners Association; Perry Fowler, Texas Water Infrastructure Network)

Against — Arthur Troell, Atascosa Water Watch; Greg Sengelmann, Gonzales County Underground Water Conservation District; Paul Weatherby, Middle Pecos Groundwater Conservation District; Joseph Fitzsimons, Texas and Southwestern Cattle Raisers Association; Billy

Howe, Texas Farm Bureau; David Yeates, Texas Wildlife Association; Jim Allison, Victoria Groundwater Conservation District, Pecan Valley Groundwater Conservation District, Refugio Groundwater Conservation District, Texana Groundwater Conservation District, Calhoun Groundwater Conservation District; Larry Fox; Jay Troell; (*Registered, but did not testify*: Hallie Bertrand, Corn Producers Association of Texas; Cyrus Reed, Lone Star Chapter Sierra Club; Harvey Everheart, Mesa Underground Water Conservation District; Josh Winegarner, Texas Cattle Feeders Association; Laura Buchanan, Texas Land and Mineral Owners Association; Jimmy Gaines, Texas Landowners Council; Daniel Berglund, Texas Rice Producers Legislative Group)

On — Gary Westbrook, Post Oak Savannah Groundwater Conservation District; Jennifer Walker, Sierra Club, Lone Star Chapter; Todd Staples, Texas Oil and Gas Association; Robert Mace, Texas Water Development Board; (*Registered, but did not testify*: Kelly Mills, Texas Commission on Environmental Quality; Bill Stevens, Texas Alliance of Energy Producers)

BACKGROUND: Water Code, sec. 16.053(e) requires each regional water planning group to submit to the Texas Water Development Board (TWDB) a regional water plan including certain planning and water management strategies.

Under Water Code, sec. 16.060 TWDB is required to participate in research, studies, and investigations to further the development of cost-effective water supplies from seawater desalination. TWDB prepares biennial progress reports on implementation.

DIGEST: CSHB 30 would require each regional water planning group to include in its regional water plan to TWDB opportunities for and the benefits of developing large-scale desalination facilities for seawater or brackish groundwater that serve local or regional brackish groundwater production zones.

The bill would amend Water Code, sec. 16.060 relating to desalination studies and research by including brackish water desalination in the

research and reporting already required for seawater desalination.

TWDB would be required to include in its biennial progress report on the implementation of desalination activities, the identification and designation of brackish groundwater production zones in areas of the state with moderate to high availability and productivity of brackish groundwater that could be used to reduce the use of fresh groundwater.

The designated production zones should be separated by hydrogeologic barriers sufficient to prevent significant impacts to water availability or water quality.

Production zones could not be located in:

- the jurisdiction of the Edwards Aquifer Authority;
- the boundaries of the Barton Springs-Edwards Aquifer Conservation District, Harris-Galveston Subsidence District, or Fort Bend Subsidence District;
- an aquifer, subdivision of an aquifer, or geologic stratum that had an average total dissolved solids level of more than 1,000 milligrams per liter and was serving as a significant source of water supply for municipal, domestic, or agricultural purposes at the time of designation of the zones; or
- an area of a geologic stratum designated or used for wastewater injection.

TWDB would be required to work with groundwater conservation districts and stakeholders to consider the Brackish Groundwater Manual for Texas Regional Water Planning Groups, any updates to the manual, and other relevant scientific data or findings when identifying and designating brackish groundwater production zones.

In designating a brackish groundwater production zone, TWDB would be required to determine the amount of brackish groundwater that the zone could be capable of producing over a 30-year period and a 50-year period without causing a significant impact to water availability or water quality.

TWDB would be required to recommend reasonable monitoring to observe the effects of brackish groundwater production within the zone.

In its biennial progress report due December 1, 2016, TWDB would have to include an identification and designation of brackish groundwater production zones for:

- portions of the Carrizo-Wilcox Aquifer located between the Colorado and Rio Grande rivers;
- the Gulf Coast Aquifer and sediments bordering that aquifer;
- the Blaine Aquifer; and
- the Rustler Aquifer.

By December 1, 2022, TWDB would be required to identify and designate brackish groundwater production zones for the other areas of the state.

This bill would take immediate effect if finally passed by a two-thirds record vote of the membership of each house. Otherwise, it would take effect September 1, 2015.

**SUPPORTERS
SAY:**

CSHB 30 would speed up the process of mapping the highly productive brackish aquifer formations. Texas has an estimated 2.7 billion acre-feet of brackish water underground that could be treated to drinking water standards or made suitable for other purposes through desalination. Desalination technology has advanced rapidly over the past decade, yet Texas lags behind states to the east and west in terms of embracing this readily available innovative water technology. Identifying and designating local or regional brackish groundwater production zones that could be used to reduce the use of fresh groundwater would be a major step toward securing the state's water supply.

**OPPONENTS
SAY:**

While CSHB 30 would not authorize any regulatory authority, the designation of production zones could be the first step in regulation of brackish groundwater. Brackish groundwater production zones would be identified and designated only by TWDB for inclusion in its biennial report. It would be more appropriate for the designation of production

zones to include a public process similar to the designation of groundwater management areas.

NOTES:

According to the Legislative Budget board's fiscal note, the bill would result in a negative impact to general revenue related funds of about \$789,000 through the 2016-17 biennium.