

BILL ANALYSIS

S.B. 1532
By: Zaffirini
Natural Resources
Committee Report (Unamended)

BACKGROUND AND PURPOSE

Austin is the second fastest growing city in the state. At current rates, firm-yield (drought-proof) water supplies will be depleted within the next two decades. New water supplies to meet this growing demand are scarce and increasingly expensive. With emerging desalination technologies, the saline portion of the Edwards Aquifer is a potentially large new water supply for a broad swath of central and southwest Texas.

Current law prohibits any injection of water that has been physically, chemically, or biologically altered either into or through the Edwards Aquifer anywhere in Travis and Hays Counties, without any distinction between whether the Edwards water is fresh or brackish/saline. This prohibition was put in place as part of S.B. 2, 77th Legislature, Regular Session, 2001, specifically to protect the freshwater Edwards Aquifer, but the author of the bill (former Senator J.E. "Buster" Brown) has since stated that it was not intended to be applicable to the brackish/saline zones.

S.B. 1532 amends current law relating to the power of the Texas Commission on Environmental Quality to authorize certain injection wells that transect or terminate in the Edwards Aquifer.

RULEMAKING AUTHORITY

It is the committee's opinion that rulemaking authority is expressly granted to the Texas Commission on Environmental Quality in SECTION 1 of this bill.

ANALYSIS

SECTION 1. Amends Subchapter D, Chapter 27, Water Code, by adding Section 27.0516, as follows:

Sec. 27.0516. PERMITS FOR INJECTION WELLS THAT TRANSECT OR TERMINATE IN PORTION OF EDWARDS AQUIFER WITHIN EXTERNAL BOUNDARIES OF BARTON SPRINGS-EDWARDS AQUIFER CONSERVATION DISTRICT. (a) Provides definitions in this section as follows:

(1) Defines "Edwards Aquifer" to mean that portion of an arcuate belt of porous, waterbearing limestones composed of the Edwards Formation, Georgetown Formation, Comanche Peak Formation, Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, and Edwards Group trending from west to east to northeast through Kinney, Uvalde, Medina, Bexar, Kendall, Comal, Hays, Travis, and Williamson Counties. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

(2) Defines "engineered aquifer storage and recovery facility" to mean a facility with one or more wells that is located, designed, constructed, and operated for the purpose of injecting fresh water into a subsurface

permeable stratum and storing the water for subsequent withdrawal and use for a beneficial purpose.

(3) Defines "fresh water" to mean surface water or groundwater, without regard to whether the water has been physically, chemically, or biologically altered, that:

(A) contains a total dissolved solids concentration of not more than 1,000 milligrams per liter; and

(B) is otherwise suitable as a source of drinking water supply.

(4) Defines "saline portion of the Edwards Aquifer" to mean the portion of the Edwards Aquifer that contains only groundwater with a total dissolved solids concentration of more than 1,000 milligrams per liter.

(b) Provides that this section applies only to the portion of the Edwards Aquifer that is within the geographic area circumscribed by the external boundaries of the Barton Springs-Edwards Aquifer Conservation District but is not in that district's territory or the territory of the Edwards Aquifer Authority.

(c) Provides that this section prevails over Section 27.051(i) (relating to prohibiting the Texas Commission on Environmental Quality (TCEQ) from authorizing by rule or permit an injection well that transects or terminates in the Edwards Aquifer) to the extent of a conflict.

(d) Prohibits TCEQ, except as otherwise provided by this section, from authorizing by rule or permit an injection well that transects or terminates in the Edwards Aquifer.

(e) Authorizes TCEQ by rule to authorize the injection of fresh water withdrawn from the Edwards Aquifer into a well that transects or terminates in the Edwards Aquifer for the purpose of providing additional recharge or the injection of rainwater, storm water, flood water, or groundwater into the Edwards Aquifer by means of an improved natural recharge feature such as a sinkhole or cave located in a karst topographic area for the purpose of providing additional recharge.

(f) Authorizes TCEQ, by general permit, to authorize:

(1) an activity described by Subsection (e);

(2) an injection well that transects and isolates the saline portion of the Edwards Aquifer and terminates in a lower aquifer for the purpose of injecting concentrate from a desalination facility or fresh water as part of an engineered aquifer storage and recovery facility;

(3) an injection well that terminates in that part of the saline portion of the Edwards Aquifer that has a total dissolved solids concentration of more than 10,000 milligrams per liter for the purpose of injecting into the saline portion of the Edwards Aquifer concentrate from a desalination facility, provided that the injection well must be at least three miles from the closest outlet of Barton Springs, or fresh water as part of an engineered aquifer and storage recovery facility, provided that each well used for injection or withdrawal from the facility must be at least three miles from the closest outlet of Barton Springs; or

(4) an injection well that transects or terminates in the Edwards Aquifer for aquifer remediation, the injection of a nontoxic tracer dye as part of a hydrologic study, or another beneficial activity that is designed and undertaken for the purpose of increasing protection of an underground source of drinking water from pollution or other deleterious effects.

(g) Requires TCEQ to hold a public meeting before issuing a general permit under this section.

(h) Provides that rules adopted or a general permit issued under this section:

(1) are required to require that an injection well authorized by the rules or permit be monitored by means of:

(A) a monitoring well operated by the injection well owner if TCEQ determines that there is an underground source of drinking water in the area of review that is potentially affected by the injection well; or

(B) if Paragraph (A) does not apply, a monitoring well operated by a party other than the injection well owner, provided that all results of monitoring are promptly made available to the injection well owner;

(2) are required to ensure that an authorized activity will not result in the waste or pollution of fresh water;

(3) are prohibited from authorizing an injection well under Subsection (f)(2) or (3) unless the well is initially associated with a small-scale research project designed to evaluate the long-term feasibility and safety of the injection of concentrate from a desalination facility or an aquifer storage and recovery project;

(4) are required to require any authorization granted to be renewed at least as frequently as every 10 years;

(5) are required to require that an injection well authorized under Subsection (f)(2)(A) or (3)(A) be monitored on an ongoing basis by or in coordination with the well owner and that the well owner file monitoring reports with TCEQ at least as frequently as every three months; and

(6) are required to ensure that any injection well authorized for the purpose of injecting concentrate from a desalination facility does not transect the fresh water portion of the Edwards Aquifer.

(i) Authorizes a monitoring well described by Subsection (h)(1), if properly sited and completed, to also be used for monitoring a saline water production well.

(j) Provides that a project is considered to be a small-scale research project for purposes of Subsection (h)(3) if the project consists of one production well and one injection well that are operated on a limited scale to provide requisite scientific and engineering information. Provides that such a project is considered to be a small-scale research project regardless of the borehole size of the wells or the equipment associated with the wells or whether the wells are subsequently incorporated into a larger-scale commercial facility.

(k) Authorizes a general permit, notwithstanding Subsection (h)(3), to authorize the owner of an injection well authorized under Subsection (f)(2) or (3) to continue operating the well for the purpose of implementing the desalination or engineered aquifer storage and recovery project following completion of the small-scale research project, provided that:

(1) the injection well owner timely submits the information collected as part of the research project, including monitoring reports and information regarding the environmental impact of the well, to TCEQ;

(2) the injection well owner, following the completion of studies and monitoring adequate to characterize risks to the fresh water portion of the Edwards Aquifer and other fresh water associated with the continued operation of the well, and at least 90 days before the date the owner initiates commercial well operations, files

with TCEQ a notice of intent to continue operation of the well after completion of the research project; and

(3) TCEQ, based on the studies and monitoring, the report provided by Texas State University--San Marcos (TxState) under Subsection (1)(2), and any other reasonably available information, determines that continued operation of the injection well as described in the notice of intent does not pose an unreasonable risk to the fresh water portion of the Edwards Aquifer or other fresh water associated with the continued operation of the well.

(l) Provides that, before TCEQ makes a determination under Subsection (k)(3):

(1) TCEQ, not later than the 15th day after the date of receipt of the results of the studies and monitoring, is required to provide the information received to TxState; and

(2) TxState, not later than the 60th day after the date of receipt of the information, is required to review and analyze the information and report its findings to TCEQ.

(m) Requires TCEQ preliminarily to make the information provided by the owner of the injection well under Subsection (k)(1) and the report provided by TxState under Subsection (1)(2) easily accessible to the public in a timely manner. Authorizes the permit to authorize the owner of the well to continue operating the well following completion of the research project pending the determination by TCEQ.

(n) Requires TCEQ, if TCEQ determines that continued operation of the injection well would pose an unreasonable risk to the fresh water portion of the Edwards Aquifer or other fresh water associated with the continued operation of the well, to notify the operator and specify, if possible, what well modifications would be adequate to prevent that unreasonable risk. Requires TCEQ, if the operator fails to modify the injection well as specified by TCEQ, to require the operator to cease operating the well.

SECTION 2. Provides for the effective date of this Act.

EFFECTIVE DATE

This Act takes effect September 1, 2013.