

BILL ANALYSIS

Senate Research Center
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S.B. 1532
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Natural Resources
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AUTHOR'S / SPONSOR'S STATEMENT OF INTENT

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 enables desalination and aquifer storage and recovery in the saline zone of a small area of the Barton Springs Edwards Aquifer, which is the primary water supply resource managed by Barton Springs Edwards Aquifer Conservation District. The bill allows for on-site injection of brine concentrate into the saline Trinity Aquifer or into the more saline parts of the Edwards Aquifer, and allows for the use of the saline Edwards as a host for aquifer storage. It would not remove any existing protections on water quality that are provided by other state and federal regulations.

S.B. 1532 also directs the Texas Commission on Environmental Quality (TCEQ) to conduct a study of protective wastewater management technologies for the contributing zone of the Barton Springs segment of the Edwards Aquifer as a precursor to additional protective rulemaking applicable to this aquifer. The objectives of this study will include defining minimum standards and numerical criteria for wastewater management and re-use strategies that are protective of existing and future water uses while also increasing the supply of potable water recharging the aquifer. TCEQ will utilize the study's findings as a basis for further rulemaking, as appropriate, since aquifer protection is already a designated use of the streams recharging this aquifer system.

As proposed, 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

Rulemaking authority is expressly granted to the Texas Commission on Environmental Quality in SECTION 1 (Section 27.0516, Water Code) of this bill.

SECTION BY SECTION 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) Defines, in this section, "Edwards Aquifer," "engineered aquifer storage and recovery facility," "fresh water," and "saline portion of the Edwards Aquifer."

(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 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 wholly or partly 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 monitoring well;

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

(3) are prohibited from authorizing an injection well under Subsection (f)(2) or (3) unless the well is 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 and that reports regarding the well be filed 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 general permit, notwithstanding Subsection (h)(3), to authorize the owner of a 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 research project if the owner submits the information collected as part of the research project, including any information regarding the environmental impact of the well, to TCEQ and TCEQ determines that continued operation of the well will not pose a risk of pollution of the fresh water portion of the Edwards Aquifer. Requires TCEQ to make the information provided by the owner of the well easily accessible to the public. 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. Requires TCEQ, if TCEQ determines that continued operation of the well will pose a risk of pollution of the fresh water portion of the Edwards Aquifer, to notify the operator and require the operator to modify the well as necessary to prevent pollution of the aquifer. Requires TCEQ, if the operator fails to modify the well as required, to require the operator to cease operating the well.

SECTION 2. Effective date: September 1, 2013.