By: Zaffirini 1-1 S.B. No. 1532 (In the Senate - Filed March 8, 2013; March 19, 2013, read first time and referred to Committee on Natural Resources; April 15, 2013, reported adversely, with favorable Committee 1-2 1-3 1-4 Substitute by the following April 15, 2013, sent to printer.) 1-5 vote: Yeas 11, Nays 0; 1-6

1-7 COMMITTEE VOTE

1-8		Yea	Nay	Absent	PNV
1-9	Fraser	X			
1-10	Estes	X			
1-11	Deuell	X			
1-12	Duncan	X			
1-13	Ellis	X			
1-14	Eltife	X			
1-15	Hegar	X			
1-16	Hinojosa	X			
1-17	Nichols	X			
1-18	Seliger	X			
1-19	Uresti	X			

1-20 COMMITTEE SUBSTITUTE FOR S.B. No. 1532

Estes Bv:

1-21 A BILL TO BE ENTITLED 1-22 AN ACT

relating to the power of the Texas Commission on Environmental 1-23 1-24 Quality to authorize certain injection wells that transect or 1-25 terminate in the Edwards Aquifer.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS: SECTION 1. Subchapter D, Chapter 27, Water Code, is amended by adding Section 27.0516 to read 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. this section:

"Edwards Aquifer" means that portion of an arcuate belt of porous, waterbearing limestones composed of the Edwards Formation, Georgetown Formation, Comanche Peak Formation, Salmon Peak Timestone. McKnight Formation, West Nueces Formation, Devil's 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 regionally.

(2) "Engineered aquifer storage and recovery facility" means 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) "Fresh water" means surface water or groundwater, gard to whether the water has been physically, regard chemically, or biologically altered, that:

(A) contains total a dissolved concentration of not more than 1,000 milligrams per liter; and (B) is otherwise suitable as a source of drinking

water supply.

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(4) "Saline portion of the Edwards Aquifer" means the portion of the Edwards Aquifer that contains only groundwater with 1-57 1-58 1-59 a total dissolved solids concentration of more than milligrams per liter. 1-60

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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.
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This section prevails over Section 27.051(i) to the

extent of a conflict.

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2-64 2-65 (d) Except as otherwise provided by this section, the commission by rule or permit may not authorize an injection well that transects or terminates in the Edwards Aquifer.

(e) The commission by rule may authorize:

- (1) 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;
- (2) the injection of rainwater, storm water, flood groundwater into the Edwards Aquifer by means of an wate<u>r,</u> or improved natural recharge feature such as a sinkhole or cave located in a karst topographic area for the purpose of providing additional recharge.

The commission by general permit may authorize: (f)

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

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:

(A) concentrate from a desalination facility; or (B) fresh water as part of an engineered aquifer

storage and recovery facility;

- an injection well that terminates in that part (3) 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:
- (A) concentrate from a desalination facility, provided that the injection well must be at least three miles from the closest outlet of Barton Springs; or
- (B) 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; (A)

(B) the injection of a nontoxic tracer dye as

- part of a hydrologic study; or (C) 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.
- The commission must hold a public meeting before issuing (g)a general permit under this section.
- (h) Rules adopted or a general permit issued under this section:
- (1) must require that an injection well authorized by the rules or permit be monitored by means of:

  (A) a monitoring well operated by the injection
- the commission determines that there is an owner 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) must ensure that an authorized activity will not result in the waste or pollution of fresh water;

  (3) may not authorize an injection well under
- 2-66 2-67 Subsection (f)(2) or (3) unless the well is initially associated with a small-scale research project designed to evaluate the 2-68 long-term feasibility and safety of: 2-69

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the injection of concentrate (A) 3 - 1from desalination facility; or 3-2

(B) an aquifer storage and recovery project;

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

(5) must 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 the commission at least as

frequently as every three months; and (6) must 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) A monitoring well described by Subsection (h)(1), if properly sited and completed, may also be used for monitoring a

saline water production well.

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- (j) 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. 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) Notwithstanding Subsection (h)(3), a general permit may 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 the commission;

- (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 the commission a notice of intent to continue operation of the well after completion of the research project; and
- the commission, based on the studies monitoring, the report provided by Texas State University--San Marcos 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
- Before the commission makes a determination under Subsection (k)(3):
- (1) the commission, not later than the 15th day after the date of receipt of the results of the studies and monitoring, must provide the info University--San Marcos; and information received to Texas
- (2) Texas State University--San Marcos, not later than the 60th day after the date of receipt of the information, must review and analyze the information and report its findings to the
- (m) The commission shall make the information provided by owner of the injection well under Subsection (k)(1) and the report provided by Texas State University--San Marcos under Subsection (1)(2) easily accessible to the public in a timely manner. The permit may authorize the owner of the well to continue operating the well following completion of the research project pending the determination by the commission.
- (n) If the commission preliminarily determines that continued operation of the injection well would pose an

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unreasonable risk to the fresh water portion of the Edwards Aquifer 4-1 or other fresh water associated with the continued operation of the 4-2 well, the commission shall notify the operator and specify, if possible, what well modifications would be adequate to prevent that unreasonable risk. If the operator fails to modify the injection well as specified by the commission, the commission shall require the operator to cease operating the well.

SECTION 2. This Act takes effect September 1, 2013. 4-3 4-4 4**-**5 4**-**6 4-7 4-8

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