BILL ANALYSIS

C.S.H.B. 3333 By: Isaac Natural Resources Committee Report (Substituted)

BACKGROUND AND PURPOSE

Interested parties contend that certain entities should be allowed to pursue aquifer storage and recovery projects to ensure a reliable water supply. C.S.H.B. 3333 seeks to address this issue by providing for permits for certain injection wells that are part of an aquifer storage and recovery project that transect a portion of the Edwards Aquifer.

CRIMINAL JUSTICE IMPACT

It is the committee's opinion that this bill does not expressly create a criminal offense, increase the punishment for an existing criminal offense or category of offenses, or change the eligibility of a person for community supervision, parole, or mandatory supervision.

RULEMAKING AUTHORITY

It is the committee's opinion that this bill does not expressly grant any additional rulemaking authority to a state officer, department, agency, or institution.

ANALYSIS

C.S.H.B. 3333 amends the Water Code, for purposes of provisions relating to a permit for an injection well that transects or terminates in a portion of the Edwards Aquifer within the external boundaries of the Barton Springs-Edwards Aquifer Conservation District, to change the applicability of the provisions from 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 to the portion of the Edwards aquifer that is within that geographic area but is not in the jurisdiction of the Edwards Aquifer Authority. The bill redefines "Edwards Aquifer" for the purposes of such provisions and conditions the consideration of surface water or groundwater as fresh water for such purposes on the water meeting the water quality standards for public drinking water established by Texas Commission on Environmental Quality (TCEQ) rule.

C.S.H.B. 3333 authorizes TCEQ by general permit to authorize the injection of fresh water into a well that transects the Edwards Aquifer provided that the well isolates the Edwards Aquifer and meets applicable construction and completion standards adopted by TCEQ; the well is part of an engineered aquifer storage and recovery facility; the injected water is sourced from a public water system, as defined by TCEQ rule, that is permitted by TCEQ; and the injection complies with nonconflicting aquifer storage and recovery project provisions. The bill extends to such an injection well provisions prohibiting applicable rules or a general permit from authorizing an injection well unless the well is initially associated with certain small-scale research projects and provisions authorizing a general permit to authorize the owner of an injection well to continue operating the well for the purpose of implementing a desalination or engineered aquifer storage and recovery project following completion of a small-scale research project if certain conditions are met. The bill revises the conditions to include consideration of the risks to the fresh water

portion of the Trinity Aquifer and to replace consideration of the risks to fresh water generally with consideration of the risks to native groundwater generally. The bill provides for the specification of operational controls for the prevention of unreasonable risk in applicable circumstances.

C.S.H.B. 3333 revises requirements for rules adopted or a general permit issued under provisions relating to a permit for an injection well that transects or terminates in a portion of the Edwards Aquifer within the external boundaries of the Barton Springs-Edwards Aquifer Conservation District with regard to the number of monitoring wells and the prevention of waste or pollution of water and requires such rules and permits to be consistent with nonconflicting aquifer storage and recovery project provisions.

EFFECTIVE DATE

On passage, or, if the bill does not receive the necessary vote, September 1, 2017.

COMPARISON OF ORIGINAL AND SUBSTITUTE

While C.S.H.B. 3333 may differ from the original in minor or nonsubstantive ways, the following comparison is organized and formatted in a manner that indicates the substantial differences between the introduced and committee substitute versions of the bill.

INTRODUCED

SECTION 1. Sections 27.0516(b), (f), (h), and (k), Water Code, are amended to read as follows:

(b) 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].

(f) The commission by general permit may 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:

(A) concentrate from a desalination facility; or

(B) 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 10,000 concentration of more than 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

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SECTION 2. Sections 27.0516(b), (f), (h), (k), and (n), Water Code, are amended to read as follows:

(b) 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 the jurisdiction [that district's territory or the territory] of the Edwards Aquifer Authority.

(f) The commission by general permit may authorize:

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

an injection well that transects and (2) 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;

(3) an injection well that terminates in that part of the saline portion of the Edwards Aquifer that has a total dissolved solids concentration 10,000 of more than 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

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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:

(A) aquifer remediation;

(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; or

(5) an injection well that transects the Edwards Aquifer provided that:

(A) the injection well isolates the Edwards Aquifer;

(B) the injected water meets the standards under the federal Safe Drinking Water Act (42 U.S.C. Section 300f et seq.); and

(C) the injection well is part of an engineered aquifer storage and recovery facility owned and operated by a municipality.

(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 well owner if the commission 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;

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:

(A) aquifer remediation;

(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; or

(5) the injection of fresh water into a well that transects the Edwards Aquifer provided that:

(A) the well isolates the Edwards Aquifer and meets the construction and completion standards adopted by the commission under Section 27.154;

(B) the well is part of an engineered aquifer storage and recovery facility;

(C) the injected water is sourced from a public water system, as defined by commission rule, that is permitted by the commission; and

(D) the injection complies with the provisions of Subchapter G that are not in conflict with 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) <u>one or more [a]</u> monitoring <u>wells [well]</u> operated by the injection well owner if the commission 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, <u>one or</u> <u>more [a]</u> monitoring <u>wells [well]</u> operated by a party other than the injection well owner, provided that all results of monitoring are promptly made available to

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(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 Subsection (f)(2), $[\Theta r]$ (3), or (5) unless the well is initially associated with a small-scale research project designed to evaluate the long-term feasibility and safety of:

(A) the injection of concentrate from a desalination facility; or

(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.

(k) Notwithstanding Subsection (h)(3), a general permit may authorize the owner of an injection well authorized under Subsection (f)(2), $[\Theta r]$ (3), or (5) 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 continued the injection well owner;

(2) must ensure that an authorized activity will not result in the waste or pollution of <u>native groundwater</u> [fresh water];

(3) may not authorize an injection well under Subsection (f)(2), $[\Theta r]$ (3), or (5) unless the well is initially associated with a small-scale research project designed to evaluate the long-term feasibility and safety of:

(A) the injection of concentrate from a desalination facility; or

(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<u>; and</u>

(7) must be consistent with the provisions of Subchapter G that are not in conflict with this section.

(k) Notwithstanding Subsection (h)(3), a general permit may authorize the owner of an injection well authorized under Subsection (f)(2), $[\Theta \mathbf{f}]$ (3), or (5) 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, the Trinity Aquifer, or [and] other native groundwater [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

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operation of the well after completion of the research project; and

(3) the commission, based on the studies and 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 well.

SECTION 2. Section 27.0516(a)(1), Water Code, is amended to read as follows:

(1) "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 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.

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

(3) the commission, based on the studies and 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, the Trinity Aquifer, or other <u>native groundwater [fresh</u> water] associated with the continued operation of the well.

If the commission preliminarily (n) determines that continued operation of the injection well would pose an unreasonable risk to the fresh water portion of the Edwards Aquifer, the Trinity Aquifer, or other <u>native groundwater</u> [fresh water] associated with the continued operation of the well, the commission shall notify the operator and specify, if possible, what well modifications or operational controls would be adequate to prevent that unreasonable If the operator fails to modify the risk. well as specified by injection the commission, the commission shall require the operator to cease operating the well.

SECTION 1. Sections 27.0516(a)(1) and (3), Water Code, are amended to read as follows:

(1) "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 Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, and Edwards Group, together with the Upper Glen Rose Formation where there is a significant hydrological connection to the overlying 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 lesspermeable Comanche Peak and Walnut Formations north of the Colorado River,]

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and underlie the less-permeable Del Rio Clay regionally.

(3) "Fresh water" means 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) <u>meets the water quality standards for</u> <u>public drinking water established by</u> <u>commission rule; and</u>

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

SECTION 3. Same as introduced version.

SECTION 3. This Act takes effect immediately if it receives a vote of twothirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2017.