

SUBJECT: Appropriating certain water flows for aquifer storage or recharge projects

COMMITTEE: Natural Resources — committee substitute recommended

VOTE: 9 ayes — Larson, Metcalf, Dominguez, Harris, T. King, Lang, Nevárez,
Price, Ramos

0 nays

2 absent — Farrar, Oliverson

WITNESSES: For — Michael Booth, Booth, Ahrens & Werkenthin; Amber Blount, Texas Alliance of Groundwater Districts; Shauna Fitzsimmons Sledge, Texas Aquifer Storage and Recovery Association; (*Registered, but did not testify*: Trey Lary, Allen Boone Humphries Robinson LLP; Alfonso Lucio, Austin Chamber of Commerce; Matt Phillips, Brazos River Authority; Steve Perry, Chevron USA; Brian Sledge, City of Bryan, Prairielands Groundwater Conservation District; Tammy Embrey, City of Corpus Christi; Edmond McCarthy, Fort Stockton Holdings; Tom Oney, Lower Colorado River Authority; C.E. Williams, Panhandle Groundwater Conservation District; Matthew Bentley, San Jose Water Group DBA Canyon Lake Water Service Company; Mia Hutchens, Texas Association of Business; Justin Yancy, Texas Business Leadership Council; Billy Howe, Texas Farm Bureau; Dean Robbins and Stacey Steinbach, Texas Water Conservation Association; Perry Fowler, Texas Water Infrastructure Network; Heather Harward, Texas Water Supply Partners; Teddy Carter)

Against — (*Registered, but did not testify*: Charles Flatten, Hill Country Alliance; Jennifer Walker, National Wildlife Federation; Adrian Shelley, Public Citizen; Chris Mullins, Save Our Springs Alliance; Vanessa Puig-Williams, Trinity Edwards Spring Protection Association)

On — (*Registered, but did not testify*: Ashley Forbes and Kim Nygren, Texas Commission on Environmental Quality; John Dupnik, Texas Water Development Board)

BACKGROUND: Under Water Code sec. 11.023, to the extent that state water has not been set aside to meet downstream instream flow or freshwater inflow needs, state water may be appropriated for certain domestic and municipal uses, agricultural and industrial uses, mining, and other beneficial uses.

Sec. 27.151 defines "aquifer storage and recovery project" as a project involving the injection of water into a geologic formation for later recovery and beneficial use.

DIGEST: CSHB 720 would allow certain unappropriated water to be used for recharge into an aquifer or for aquifer storage and recovery (ASR) and establish requirements for applications or amendments to water rights related to aquifer recharge or ASR projects.

Water appropriated for aquifer recharge or storage. CSHB 720 would allow unappropriated water, including storm water and floodwater, to be appropriated for recharge into an aquifer. An aquifer recharge project would be considered an allowed appropriation of state waters under Water Code sec. 11.023.

The bill also would allow water appropriated for diversion and a beneficial use to be stored in an aquifer storage and recovery project before the water was recovered for that use.

The Texas Commission on Environmental Quality (TCEQ) could authorize either appropriation of water if it determined that:

- the appropriation was in accordance with Water Code sec. 11.023;
- the application for or amendment to the water right complied with state law regarding water use applications; and
- the application or amendment included any special conditions TCEQ considered necessary.

The application for or amendment to the water right could be for water that was not continuously available.

An application for a water right or amendment to a water right would be subject to statutory motion and hearing requirements. No later than 180 days after a water right or water right amendment was administratively complete, TCEQ would have to complete a technical review of the application.

TCEQ would have to adopt rules to provide the considerations for determining the frequency that the water had to be available before it could be appropriated.

Rio Grande basin. Before approving a water right application or amendment for a new appropriation of water in the Rio Grande basin for aquifer recharge or ASR, TCEQ would have to consider the water accounting requirements for any international water sharing treaty or other agreements in the area. TCEQ could not authorize a new appropriation of water that would result in a violation of a treaty or court decision.

Aquifer recharge projects. The bill would define an "aquifer recharge project" as a project involving the intentional recharge of an aquifer by means of an injection well or other means of infiltration, including actions designed to reduce declines in the aquifer's water level, supplement the quantity of available groundwater, improve water quality, improve spring flows, or mitigate subsidence.

TCEQ would have exclusive jurisdiction over the regulation and permitting of recharge injection wells, defined as Class V injection wells used for the injection of water into a geologic formation for an aquifer recharge project, including an improved sinkhole or cave connected to an aquifer. CSHB 720 would allow TCEQ to authorize the use of a recharge injection well by rule or under an individual or general permit.

Aquifer recharge regulations. In adopting a rule or issuing a permit, TCEQ would have to consider whether the injection of water would comply with the federal Safe Drinking Water Act, the effect of the project on existing wells, and whether the introduction of water into the relevant geologic formation would alter the quality of the native groundwater to a

degree that would render it harmful or require an unreasonably high level of treatment.

TCEQ would have to provide for public notice and comment for a proposed general permit under the bill. The commission also would have to require applicants for individual permits to meet certain notice requirements.

The bill also would require TCEQ to adopt technical standards governing the approval of the use of a recharge injection well. TCEQ could not adopt or enforce groundwater quality protection standards for the water injected into a recharge injection well that were more stringent than federal standards.

Aquifer recharge operations. An aquifer recharge project operator would have to install a meter on each recharge injection well associated with the project. Each year, the operator would have to report to TCEQ the volume of water injected for recharge the previous calendar year.

The bill would require a project operator to perform water quality testing annually on water to be injected as part of an aquifer recharge project and provide the results to TCEQ.

Conversion of storage from reservoir to aquifer. The holder of a water right authorizing the storage of water for a beneficial use in a reservoir that had not been constructed could file an application to amend the water right to remove the authorization, provided that the diverted water would be stored in an ASR project for later retrieval.

The application would be exempt from any notice and hearing requirements of a statute, TCEQ rule, or permit condition. The application could not be referred to the State Office of Administrative Hearings for a contested case hearing if the requested change would not negatively affect other water rights holders or the environment to a greater degree than the original permit.

TCEQ could adopt rules providing an expedited procedure for adopting an application to convert water use from storage in a reservoir to ASR.

Water loss from evaporation or sedimentation. An application for an amendment to a water right to convert water use from storage in a reservoir to ASR could request an increase in the amount of water diverted or the diversion rate on the basis of an evaporation credit that accounted for the amount of water that would have evaporated if the reservoir had been constructed.

The holder of a water right authorizing an appropriation of water for storage in a reservoir that had lost storage because of sedimentation could file an application for an amendment to the water right to change the use or purpose from storage by diversion to storage as part of an ASR project for later retrieval and use as authorized by the original water right in an amount equal to all or part of the water yield lost to sedimentation.

The above applications would be subject to notice and hearing requirements. If such an application was granted, TCEQ would have to include in the amendment any special conditions necessary to protect existing water rights and comply with requirements related to the effect of the permit on bays, estuaries, instream uses, environmental flow standards, and set-asides.

Non-applicability. CSHB 720 would not affect the ability to regulate an ASR project as authorized under certain other laws related to the Edwards Aquifer Authority, Harris-Galveston Subsidence District, Fort Bend Subsidence District, Barton Springs-Edwards Aquifer Conservation District, or Corpus Christi ASR Conservation District.

The bill would not affect the authority of TCEQ regarding recharge projects in certain portions of the Edwards underground reservoir, injection wells that transect or terminate in the Edwards Aquifer, or ASR projects under other statutes.

The 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, 2019.

SUPPORTERS
SAY:

CSHB 720 would incentivize water users to capture and store unappropriated water underground, where the water cannot be lost through evaporation. The bill would establish an expedited permit for this water use and give the Texas Commission on Environmental Quality (TCEQ) 180 days to review the permit, making aquifer storage and recovery or recharge a priority for the agency. TCEQ would be required to consider the process for issuing an evaporation credit permit for water that would be gained by storing water in an aquifer rather than a reservoir, further promoting the use of these projects.

According to a study by the University of Texas at Austin, from 2015 to 2017 more than twice as much water as Texas used to meet all its water supply needs in 2016 flowed from inland basins to the state's coast. This shows a significant potential for the storage of unappropriated surface water, such as floodwater, in ASR projects. Storing more of this water could help the state manage peak water demands and better control subsidence while also preparing the state to meet its future water needs.

Even as Texas sees large, unappropriated surface water flows, serious groundwater depletion has been recorded in several aquifers, underscoring the need to recharge those aquifers to maintain or increase the state's water supply. CSHB 720 would allow TCEQ to develop regulations for a permit to use unappropriated flows for aquifer recharge projects, which have environmental benefits and assist with storm water management. Surface water already flows underground into aquifers, and the bill simply would create a formalized process to purposefully perform this activity.

TCEQ already has the authority to permit the use of unappropriated flows for water intermittently available during floods. CSHB 720 would not inappropriately expand this authority but instead would allow these water flows to be stored and used more beneficially. Entities currently store this water in surface water reservoirs, where the water may evaporate. Allowing the water to be stored underground would help increase the total

amount of water retained for beneficial use.

TCEQ also already oversees the use of injection wells by issuing underground injection control permits, and this bill falls within the existing statutory oversight process for surface water injection.

The bill would not create a carve-out for water rights related to aquifer recharge or ASR, since any new water right holder still would have to respect the existing environmental flow standards. Any permit or amendment to a permit for a new water right that could affect existing water rights would be subject to notice and hearing requirements.

OPPONENTS
SAY:

CSHB 720 would make aquifer recharge a beneficial water use by default. This means that public surface water that was owned by the state could be converted to private ownership by injecting it into the ground, with little regard to how the water would be used afterwards. Currently, there is no system in the state to manage the interrelationship between surface water and groundwater, and as a result this process lacks oversight.

The bill is based on an idea that there would be an excess appropriation of water available for use in aquifer recharge or ASR projects, which is not the case. There also are concerns that the use of unappropriated flows would alter natural hydrological flows, since the natural variability in wet and dry seasons is needed but could be affected by water use under CSHB 720. Instead of using surface water to recharge groundwater, the Legislature should focus on strengthening and updating environmental flow standards and water availability models.

The bill also would exempt certain applications and amendments to water rights for aquifer recharge or ASR projects from notice and hearing requirements and any special conditions of TCEQ, potentially impacting existing water rights.

OTHER
OPPONENTS
SAY:

CSHB 720 may not be necessary because surface water already may be captured and stored in an ASR project. However, water suppliers do not see a compelling need for such water projects, and there are no proposed

projects dependent on the expedited permit process provided by the bill.