SUBJECT:	Management of groundwater by the Edwards Aquifer Authority
COMMITTEE:	Natural Resources — committee substitute recommended
VOTE:	5 ayes — Puente, Hamilton, Guillen, Hilderbran, O'Day
	0 nays
	4 absent — Gattis, Creighton, Gallego, Laubenberg
SENATE VOTE:	On final passage, May 4 — 30-0
WITNESSES:	No public hearing
BACKGROUND:	The Edwards Aquifer is an underground water-bearing geologic formation that stretches from Kyle to Bracketville. The aquifer is the primary water source for more than 1.7 million people, including the population of San Antonio. In 1993, the 73rd Legislature enacted SB 1477 by Armbrister, which established the Edwards Aquifer Authority (EAA) to regulate groundwater use from the aquifer in order to comply with federal endangered species protections. The authority is governed by an elected board of directors.
	Currently, permitted withdrawals from the Edwards Aquifer may not exceed 450,000 acre-feet per year. On January 1, 2008, this cap on permitted withdrawals is due to be lowered to 400,000 acre-feet per year.
DIGEST:	CSSB 1341 would make several changes to the regulation of the Edwards Aquifer by the EAA.
	<b>Allowable withdrawals.</b> Beginning January 1, 2008, the cap on permitted withdrawals from the Edwards Aquifer would be as close as possible to 572,000 acre-feet, based on:
	<ul> <li>all initial permits issued on or before January 1, 2005, at the provisional groundwater withdrawal amount; and</li> <li>all filed applications for which permit issuance was pending action by the EAA as of January 1, 2005, at the amount set out in</li> </ul>

paragraph 3.0 of the permits and calculated in the same manner to those permits provisionally issued on or before January 1, 2005.

The EAA could not allow withdrawals from wells drilled after June 1, 1993, except for:

- replacement, test, or exempt wells; or
- an amendment to an initial regular permit authorizing a change in the point of withdrawal under that permit.

If the level of the aquifer was equal to or greater than 660 feet, rather than 650 feet, above the mean sea level as measured at well J-17, the authority could authorize withdrawals from the San Antonio pool, on an uninterruptible basis, of permitted amounts.

The bill would eliminate a provision that currently requires the EAA to limit additional withdrawals to ensure that springflows are not affected during critical drought conditions.

**Critical period withdrawal reduction stages.** By January 1, 2008, the EAA would have to adopt a critical period management plan with withdrawal reduction percentages in the following amounts, as applicable to either well levels or spring flows. The would be based on the following requirements:

 TABLE 1 - Withdrawal Reduction Stages for the San Antonio Pool

Comal	San Marcos	Well Level	Critical	Withdrawal
Springs	Springs Flow	(MSL)	Period	Reduction
Flow (CFS)	(CFS)		Stage	Percentage
<225	<96	<660	Ι	20%
<200	<80	<650	II	30%
<150	N/A	<640	III	35%
<100	N/A	<630	IV	40%

 TABLE 2 - Withdrawal Reduction Stages for the Uvalde Pool

Withdrawal Reduction -	Well Level (MSL)	Critical Period Stage
Uvalde Pool		
N/A		Ι
5%	<850	II
20%	<845	III
35%	<842	IV

"MSL" would mean the elevation in feet above sea level of water in a well. "CFS" would mean cubic feet per second.

Greater withdrawal reductions would be triggered if the 10-day average of springflows at the Comal or San Marcos springs or the 10-day average aquifer level dropped below their lowest trigger levels.

Beginning on September 1, 2007, the EAA could not require withdrawals to be less than an annualized rate of 340,000 acre-feet, under Stage IV. Beginning on January 1, 2013, the EAA could not require withdrawals to be less than an annualized rate of 320,000 acre-feet, under Stage IV, unless lower withdrawals were necessary for protection of listed, threatened, and endangered species, as required under federal law, based on recommendations from the recovery implementation program created under the bill.

The EAA could require additional withdrawal reductions before considering the recovery implementation program if discharges at the Comal or San Marcos Springs declined an additional 15 percent after Stage IV withdrawal reductions. This provision would expire after recommendations from the recovery implementation plan were adopted.

Without respect to the critical period adopted by the authority, a person authorized to withdraw groundwater for irrigation would be allowed to finish one already planted crop in that calendar.

**Permit retirements.** The bill would eliminate the requirement that the permitted withdrawal requirements be reduced to 400,000 acre-feet per year. Fees assessed by the EAA could not be used for the reduction of withdrawals or for retiring permits.

**Recovery implementation program.** The bill would direct the EAA to develop a recovery implementation program for threatened or endangered species with input from the U.S. Fish and Wildlife Service, other federal agencies, and interested stakeholders.

The EAA, along with specified state agencies and stakeholders, would have to enter into an agreement and prepare a document that would:

- recommend withdrawal adjustments for the protection of endangers species; and
- include provisions to pursue funding for eligible programs.

The document would have to be approved and executed by September 1, 2012, and take effect by December 1 of that year.

Texas A&M University would assist in creating a steering committee to oversee the program, which would include representatives from the EAA, state agencies, holders of initial regular permits from the EAA, and three holders of surface water rights in the Guadalupe River Basin.

The steering committee would appoint an expert science committee to analyze species requirements and make recommendations for withdrawal reduction levels.

The steering committee, with input from the expert science committee and other stakeholders, would submit recommendations to the EAA. The EAA would review those recommendations and adopt a critical period management plan.

The bill would require the EAA to provide an annual report to the governor, the lieutenant governor, and the speaker of the House on the status of the recovery implementation plan.

**Recharge facilities.** The EAA would be authorized to own, finance, design, build, construct, operate, or maintain recharge facilities except in the Uvalde Pool, where the authority only could contract with an entity based in Uvalde County.

The bill would take effect September 1, 2007.

SUPPORTERS SAY: CSSB 1341 appropriately would balance environmental, residential, and other concerns with respect to the EAA. By allowing a reasonable increase in withdrawals from the aquifer, the bill would prevent ratepayers from having to support a costly buy-down of water rights above the current withdrawal level. To protect environmental considerations, the bill would establish reduction requirements during critical periods of drought when springs were impacted most severely.

> Currently, there is an irreconcilable contradiction in the EAA statute that requires a withdrawal limit amount of 400,000 acre-feet beginning in 2008. However, the statute also requires the EAA to respect permits based on historic and irrigation use. Because the permitted amount is more than 100,000 acre-feet over the 2008 level that exists in current law, some accommodation must be made. Without reconciling this discrepancy, the EAA would be responsible for buying down permits at a potential cost of more than \$1 billion. CSSB 1341 would respect existing permits while incorporating environmental protections and allow for additional study to determine if the withdrawal amount needed to be adjusted in the future.

> The bill would create a thorough Recovery Implementation Program developed in accordance with U.S. Fish and Wildlife Service practices that would involve an extensive group of stakeholders engaged in the sustainability of the Edwards Aquifer. The Recovery Implementation Program would provide recommendations to the EAA in order to determine the appropriate withdrawal level going forward. This consensus-based process would balance the interests of communities and entities relying on the aquifer for residential, commercial, recreational, and agricultural uses while protecting the delicate environmental balance that sustains threatened species associated with the aquifer.

> The bill would raise the withdrawal limit to 572,000 acre-feet, an amount that would be subject to adjustment through the Recovery Implementation Program. Further, the critical period management procedure would hold down withdrawals when well levels and spring flows were reduced by drought. This would protect the San Marcos and Comal springs and protected species. Further, history has shown that permitting in itself is an effective method for managing demand, as permit holders become more aware of their allotted amounts. Removing the conflict in current law would provide certainty to permit holders and allow more effective management of demand from the aquifer.

	San Antonio is a statewide leader in water conservation, and many other users of the Edwards Aquifer also have invested substantially to reduce their water consumption. These advances would not vanish under CSSB 1341, while Edwards Aquifer users would continue their committed stewardship of their important resource.
	The EAA board is an elected body that is accountable to its voters. For this reason, it would be inappropriate to make the recommendations of the Recovery Implementation Program mandatory and binding.
OPPONENTS SAY:	By allowing pumping of the Edwards Aquifer up to the currently permitted amount, CSSB 1341 effectively would eliminate the pumping cap for all practical purposes. This level of pumping on a regular basis likely would be unsustainable over the long term. Although the bill would incorporate reductions in pumpage during drought periods, it would be better for the aquifer ecologically and hydrologically if a lower level of regular pumping were allowed.
	Under current law, the EAA is empowered to raise the 400,000 acre-feet cap if the authority can demonstrate scientifically that doing so would not be environmentally harmful. CSSB 1341 would undermine this consideration, allowing the cap to be raised due to permit considerations rather than scientific considerations. The substantial increase in the withdrawal limit under the bill could put the aquifer on a collision course with the Endangered Species Act, representing a step back in protection of the ecosystem of the Edwards Aquifer and the communities that rely on Edwards Aquifer spring flow.
	The current system has been effective as an inducement to entities to repair infrastructure, implement conservation policies, develop efficient agricultural water practices, and diversify water sources. Withdrawals have gone down from a peak of more than 542,000 acre-feet in 1989 to 366,000 acre-feet in 2005. If the withdrawal limit were raised, it is likely that pumping would float up to the limit. The effectiveness of the new critical period procedures is unknown, and embarking on the plan in the bill would be risky.
OTHER OPPONENTS SAY:	The bill would not include any environmental interests on the stakeholders committee for the Recovery Implementation Program. Because environmental considerations are key to preserving the sustainability of the Edwards Aquifer and the protection of threatened species,

	environmental interests need to have a chance to participate directly in the recommendations made by the Recovery Implementation Program.
NOTES:	The House committee substitute added language specifying that the 572,000 acre-feet cap would be based on all initial permits issued at the provisional groundwater withdrawal amount and all filed applications for which permit issuance was pending action.
	A similar bill, HB 1292 by Puente, was placed on the House General State Calendar for May 4 and was postponed until May 10, when the House took no further action.