
2 Background

High growth rates and limited water supplies within Williamson County encouraged water utilities to look outside of their river basin to meet projected demands for water. In 1999, at the request of the City of Round Rock and Williamson County, the Texas Legislature passed House Bill 1437 (HB 1437) authorizing the LCRA to transfer up to 25,000 acre feet of water per year to Williamson County under three major conditions.

- First, HB 1437 authorized the LCRA to transfer additional surface water to other than its existing municipal customers in Williamson County, technically an inter-basin transfer, in a manner to assure “no net loss” to the Colorado River Basin (the Basin). The bill did not define the term “no net loss.”
- Second, the bill required an additional charge to be added to the base water rate and collected in a fund – Agricultural Water Conservation Fund (the Ag-Fund) – to pay the costs of mitigating any adverse effects of the transfer. It set a minimum of 10 percent.
- Third, HB 1437 required that prior to using the Agricultural Water Conservation Fund, the division should consult with an advisory committee comprised of representatives from 3-counties: Colorado, Wharton, and Matagorda. Appointments were made by the local county judge in each county. The Agriculture Water Conservation Advisory Committee (Ag-Committee) would be responsible for representing producers’ interests. In its November 11, 2003, letter the Ag-Committee identified the following items in defining “no net loss”:¹

Number 1 — initially proposed that a “credit” balance always be maintained regarding makeup water in relation to water delivered.

Number 2 — stated this as “..at no time can there be a negative balance between water exported ... and replacement water ... Water has to be accrued.. to match the amount to be transferred...”

Number 3 — “ (1) alternative water supplier ... shall in aggregate, equal or exceed the diversions ... on an annual basis. (2) at no time shall total diversions ... for the previous twelve (12) months exceed aggregate water developed and/or conserved ... during the same twelve (12) month period.”

The bill restricted the use of the Agricultural Water Conservation Fund strictly to develop water resources or other water use strategies to replace or offset the volume of water transferred to Williamson County.

¹ Unpublished letter from Haskell L. Simon to Robert W. Lambert, Chairman, LCRA Board of Directors, November 11, 2003, Austin, TX, p. 2.

2.1 HB 1437 Requirements

The requirements of HB 1437 can be grouped into three main categories: 1) those related to assuring no net loss; 2) those related to the volume of transferred water; and 3) those related to the public process. A copy of the bill is presented in Attachment 1. A discussion of these categories is presented below.

2.1.1 Agriculture Advisory Committee

HB 1437 designated an Agriculture Water Conservation Fund Advisory Committee to consult with the LCRA regarding the use of water conservation funds. Accordingly, the LCRA is required to consult with the Agriculture Advisory Committee prior to determining how it will use the money from the Agriculture Water Conservation Fund. Committee members shall be appointed by the county judges of Matagorda, Wharton, and Colorado counties.

2.1.2 Agriculture Water Conservation Fund

Funds collected from the surcharges on the reservation and/or water use fees on water transferred to Williamson County are collected under a separate fund designated as the Agricultural Water Conservation Fund. The LCRA can only use this fund to develop new water resources or water use strategies to replace or offset the water transferred to Williamson County. According to HB 1437:

222.029 (c) “The authority shall deposit any money the authority receives from the additional charge, and may deposit any other money as the board determines, into a separate fund designated as the agricultural water conservation fund. The authority may use money from the agricultural water conservation fund only for the development of water resources or other water use strategies to replace or offset the amount of surface water to be transferred to Williamson County, including the development and implementation of methods, programs, and strategies relating to groundwater resources, reuse, conservation, and other opportunities to reduce the reliance on surface water for agricultural irrigation...”

2.1.3 No Net Loss and Surcharges

The water transfer should result in "no net loss" of water to the Colorado River watershed. According to HB 1437:

222.029 (c) “Water resources developed or conserved through the additional charge may be acquired from any source inside or outside the boundaries of the district and shall be used to benefit the water service areas of the authority’s irrigation operations.

222.029 (a)(3)(B) “...a person or entity that pays for the water in amount sufficient to pay both the authority’s applicable water rate and an additional charge to pay the costs of mitigating any adverse effects of the transfer of surface water to Williamson County from the Colorado River watershed, and provided the transfer results in no net loss of water to the Colorado River watershed as determined by the authority’s board of directors.”

2.1.4 Transfer Limits

HB 1437 authorizes LCRA to transfer up to 25,000 acre-feet of water per year to Williamson County under certain conditions. The bill requires an additional charge to be added to the base water rate to pay the costs of mitigating any adverse effects of the transfer of water to Williamson County from the Lower Colorado River watershed. The bill states:

222.029 (b) "... the volume of surface water authorized for transfer by the authority in accordance with subsection (a)(3)(B) may not exceed 25,000 acre-feet per annum, it being the intent of the legislature that the authority shall not be the sole provider of surface water to Williamson County."

2.1.5 Public Process

HB 1437 requires that prior to using the Agriculture Water Conservation Fund, the authority should consult with an advisory committee. The so-called Agriculture Water Conservation Fund Advisory Committee would be responsible for representing the irrigation interests. HB 1437 states:

222.029 (b) "Before its determination of the use of money from the agricultural water conservation fund, the authority shall consult with an advisory committee representing agricultural irrigation interests that is appointed by the county judges of Matagorda, Wharton, and Colorado counties."

2.2 Other Conditions and Considerations

There are a number of other contractual, regulatory and legislative conditions that affect the implementation of HB 1437. These include the:

- BRA/LCRA water sales contract for HB 1437 water;
- LCRA/SAWS project;
- BRA inter-basin transfer permit;
- LCRA Water Management Plan; and
- Federal program EQIP.

2.2.1 BRA/LCRA Contract for HB 1437 Water

After approval of HB1437, the LCRA Board approved entering into a Water Sale Agreement with the BRA for the purchase of the entire 25,000 af/y. Both authorities executed that agreement in October 2000. The BRA Water Sale Agreement is generally based on the standard water sale agreement used by the LCRA with the following exceptions:²

² Unpublished summary prepared by staff of the Lower Colorado River Authority, Austin, Texas.

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- The rate charged to BRA will include the standard LCRA raw water rate(s) (for reserved and/or diverted water) plus the conservation charge (currently set at 25 percent).
 - A joint feasibility study will be developed in order to evaluate various water supply sources, treatment and delivery systems to provide water to retail providers in Williamson County. HDR Engineering Inc. has completed this study, and a summary and recommendations of this study was presented to a joint meeting of the LCRA and BRA Boards in February 2001.
 - The BRA may terminate the ten years after the effective date of the contract. The effective date is August 22, 2001, the date the interbasin permit was granted. Therefore, the contract may be terminated by BRA on August 22, 2011.
 - If the BRA does not obtain commitments for the water from retail water providers within eighteen months of the approval of the inter-basin transfer, the LCRA may unilaterally reduce the amount of water allowed to be purchased.
 - Any new facilities located within Williamson County which are required to divert, transport or treat the surface water will be acquired, constructed and owned by the LCRA and operated by the BRA unless the LCRA and the BRA agree otherwise

A copy of the contract is included in Attachment 2.

2.2.2 BRA Inter-basin Transfer Permit

Texas Natural Resource Conservation Commission issued an inter-basin transfer permit to the Brazos River Authority on August 22, 2001. A copy of the BRA Inter-basin Transfer Permit Terms and Conditions is included in Attachment 3. The permit authorized the Brazos River Authority to:³

“use water from storage from Lake Buchanan, Colorado River Basin, Llano and Burnet Counties and/or from Lake Travis, Colorado River Basin, Travis County, in an amount not to exceed 25,000 acre-feet of water for municipal, industrial, and irrigation use within the service area of the BRA in Williamson County within the Brazos River Basin.”

The permit identifies four points of diversion from where the water could be transferred to Williamson County. These include a point on the perimeter of Lake Travis and three other points on the Colorado River located downstream of Lake Travis. The permit also states:⁴

“Water authorized for use under this permit shall be in accordance with the Water Conservation Plans and Drought Contingency Plans filed by the LCRA and BRA and approved by the Texas Natural Resource Conservation Commission.”

³ Texas Natural Resource Conservation Commission, “Permit to Use State Water,” Permit no. 5730, September 25, 2001.

⁴ Ibid.

2.2.3 Relationship with LCRA/SAWS Project

This section discusses the relationship between HB 1437 and the LCRA/SAWS Project. Table 2.1 includes Section 2.1 of the First Amendment to Definitive Agreement Between San Antonio Water System and Lower Colorado River Authority. This amendment allows the LCRA to implement water reduction methods to offset the water transferred to Williamson County despite Section 1.7 of the SAWS Definitive Agreement (see Table 2.2). Attachment 4 includes SAWS Contract Amendment 1.

Table 2.1 HB 1437 – LCRA/SAWS Project Relationship

“First Amendment to Definitive Agreement Between San Antonio Water System and Lower Colorado River Authority Dated March 1, 2002

Section II WATER DEMAND AND REDUCTION MEASURES

2.1. In the event LCRA elects to transfer surface water to a place in Williamson County under a water sale contract pursuant to Section 27 of the LCRA Act, whether such contract exists as of the date of this First Amendment or not, at any time prior to the end of the Study Period, and LCRA, in accordance with the procedures established in Section 27 of the LCRA Act, determines that the most cost effective method of offsetting such transferred water is the implementation of one or more of the water demand reduction methods identified in the Region K SB-1 Plan, then notwithstanding the provisions of Section 1.7 of the Definitive Agreement, LCRA may implement such water demand reduction methods to the extent necessary to offset the water transferred to Williamson pursuant to Section 27 of the LCRA Act, subject to the provisions set out in this First Amendment.”

Source: First Amendment to Definitive Agreement Between San Antonio Water System and Lower Colorado River Authority, LCRA, Austin, TX, February 28, 2003.

Table 2.2 SAWS Definitive Agreement

“Section 1.7. LCRA Agreement to Withhold Water Reservation and Delivery During the Study Period, LCRA agrees not to reserve, sell, transfer, donate, or otherwise dispose of to any third party any surface water up to the first 150,000 acre-feet per year that the Feasibility Studies reveal as being potentially available as additional future supplies if one or more SAWS Projects were to be constructed or implemented in accordance with the Feasibility Studies. It is expressly understood that all of the demand reduction measures and the supply development projects identified in the Region K SB-1 Plan as having the potential to result in 330,000 acre feet of water per year are exclusively available to meet the goals of this Definitive Agreement, except to the extent that water associated with any of the measures or projects becomes Released Water under this Definitive Agreement. However, to the extent agreeable to both Parties, alternatives may be jointly-studied or jointly-implemented, with appropriate cost-sharing, to meet the requirements of Section 27 of the LCRA Act. This section shall not be construed to prevent or impair the LCRA from planning for or constructing the Region K Projects, or from reserving, selling, transferring, donating or otherwise disposing of any water currently available to the LCRA or any water that may be made available in the future as a result of constructing or planning for the construction of any Region K Component Projects or made available from any source other than the SAWS Projects.”

Source: Definitive Agreement Between San Antonio Water System and Lower Colorado River Authority, Lower Colorado River Authority, Austin, TX, March 1, 2002, Section 1.7.

Other terms of the SAWS Definitive Agreement specify the payment terms and conditions for assignment of Region K SB-1 Plan projects developed prior to implementation of the LCRA/SAWS Project.

If the SAWS project reserves the water developed under the HB1437 program, the LCRA will reimburse the Ag Fund the amount of money that was expended from the Ag Fund to implement the conservation measures for HB 1437 water. In other words, the amount refunded would equal the cost to implement the projects net of any grants or other contributions applied to the cost of the projects.

The reimbursement would occur at the time SAWS reserves the water which, under the Definitive Agreement, will be sometime between 2010 and 2015, depending on when the studies are complete and the permits are obtained.

However, HB1437 water projects developed before the reservation date would continue to be available to Williamson County for minimum of 10 years after the reservation date.

2.2.4 Previous Conservation Estimates

The LCRA SAWS Project Viability Assessment is an annual report that estimates the range for potential water savings from on-farm and in-division improvements. Table 2.3 is a summary of 2004 agricultural water conservation estimates based on three different approaches – average, optimistic, and pessimistic – to water conservation. According to the data presented in Table 2.3, water savings from in-division improvements are potentially greater than water savings from on-farm improvements. Table 2.4 provides a balance sheet for volume of water committed to SAWS and HB 1437 projects and the estimated average volume of agricultural water savings. The total volume of water allocated to out-of-basin water users exceeds the upper level of the water volume that can be conserved in a sustainable average basis. Table 2.4 documents that the expected savings in water use through conservation (see the “total” row) exceed the volume of water transferred to Williamson County.

Table 2.3 Summary of Agricultural Water Conservation Estimates

	Agricultural Conservation Savings (ac-ft/year)		
	Average Case	Optimistic Case	Pessimistic Case
On-farm Conservation	35,811	53,813	18,002
Conservation from Adoption of New Varieties	25,585	34,113	17,057
Division Conservation ¹	76,891	88,260	56,778
Total¹	136,931	176,187	87,752

¹ Does not include efficiency improvements in the Pierce Ranch Irrigation district.

Table 2.4 Water Balance Sheet

	Volume of Water Committed (AF/Y)	Volume of Water Conserved (AF/Y)
SAWS Project	150,000	-
HB 1437 Project	25,000	-
Total	175,000	-
Estimate of Sustainable Average Water Conservation	-	136,931

2.2.5 Environmental Quality Incentives Program (EQIP)

The Farm Security and Rural Investment Act of 2002 (Farm Bill) reauthorized the Environmental Quality Incentives Program (EQIP) to provide a voluntary conservation and promote agricultural production and environmental quality. “EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land.”⁵

According to the data provided by the NRCS, a total of 21,002 acres in LCRA irrigation districts are under contract to be precision leveled prior to 2011. Table 2.5 provides a summary of the acres to be precision-leveled with EQIP funding in three counties associated with the LCRA irrigation districts.

The Farm Bill authorized EQIP funding through 2007. Even though EQIP contracts extend up to 10 years, funding may not be available beyond 2007. The amount of funding provided to the farmers through EQIP depends upon annual appropriations.

Table 2.5 Summary of EQIP Precision Leveling Planned and Applied (in acres)

County	Planned	Installed	Remaining
Colorado	15,344	1,251	14,093
Wharton	4,923	1,136	3,787
Matagorda	736	0	736
Total	21,002	2,387	18,616

2.2.6 LCRA Water Management Plan

According to the 1999 Water Management Plan for the Lower Colorado River Basin, the “LCRA has committed... to meet the instream flow maintenance and bays and estuaries flow needs.” Thus, the LCRA’s intent is to assure that any water replacement strategy that is implemented complies with its Water Management Plan in maintaining instream flows and inflows to the bays and estuaries.

2.2.7 Irrigation district Groundwater Wells

The LCRA owns five active and one abandoned groundwater wells in Lakeside Irrigation district and one groundwater well in Gulf Coast Irrigation district. Under continuous operation, the combined capacity of the LCRA’s five active groundwater wells in Lakeside Irrigation district is approximately 20,462 acre feet per year. Table 2.6 provides a summary of capacity and location of these five active wells with capacity expressed in gallons per minute.

⁵ *Environmental Quality Incentives Program*, Natural Resources Conservation Service, United States Department of Agriculture. Online. Available: <http://www.nrcs.usda.gov/programs/eqip/>. Accessed: April 13, 2005.

Table 2.6 Summary of Lakeside Irrigation district Groundwater Wells

	Blair Well	J. M. Steiner Well	Droll Well	Catspring Well	Jitney Ridge Well	Total Capacity (gpm)
Capacity in gallons per minute (gpm)	2,378	2,437	2,652	1,880	3,335	12,682

Groundwater is currently regulated by two groundwater conservation districts in the lower Colorado basin: the Coastal Bend Groundwater Conservation District (CBGCD) in Wharton County and the Coastal Plains Groundwater Conservation District (CPGCD) in Matagorda County. There is currently no groundwater conservation district in Colorado County. New groundwater development in either Wharton County or Matagorda County would require acquisition of permits for a new well. The rules of the CBGCD limit location of new wells with a casing size that exceeds 8 inches in diameter (typical for irrigation wells or wells to supplement surface water) to no less than 1,500 feet from any other permitted or registered well. The rules for the CPGCD limit location of new wells with a casing size exceeding 8 inches in diameter to no less than 2,500 feet from other permitted or registered wells. There are fees assessed for any new well permit and a fee for production may also be charged.

Portions of the Lakeside and Garwood Irrigation Districts that are located in Colorado County would not currently require permits for wells to supplement surface water supply. The portions of these irrigation districts located within Wharton County would require permits for wells that may be used to supplement surface water. The Gulf Coast Irrigation District is located mostly in Matagorda County with a very small portion of the district in Wharton County. Any wells used to supplement surface water in the Gulf Coast District would need to be permitted in either the CPGCD or the CBGCD.

There are currently 5 active wells in the Lakeside Irrigation District which under the rules of the CBGCD should be registered and permitted. Existing wells may either be permitted through the normal permitting process or under the "historical user status" provision of the groundwater district's rules, which allows permitting of these wells without complying with the well spacing requirements.