

**Question/Comment Tracking Form #1**

**Name:** Williamson County Meeting

**Address:**

**Comment:** Suggestion – partner or contract with some of the private and public interests currently purchasing water rights in Carrizo-Wilcox aquifer area.

**Date received:** July 1, 2004

**Expert referred:** N/A

**Reply sent out:** Since no contact information was provided, a reply could not be sent out.

**Date replied:** N /A

## **Question Tracking Form #2**

**Name:** Isaac W. Norman

**Address:** 12500 FM 1660 Taylor, TX 76574

**Phone:** (512) 352 3056

**Question:** I live on Brushy Creek therefore downstream of the of the diversion structure – what is the guarantee that the integrity of Brushy Creek will be maintained?

**Date received:** 07/01/04

**Expert referred:** Robert Adams, CH2M Hill

### **Reply sent out:**

The integrity of Brushy Creek is a broad term that may mean several different things. It is our understanding that you are primarily addressing the quantity of flow and its corresponding ability to maintain the integrity of the creek. Therefore, the following response is provided on that basis.

Only a conceptual plan to divert flow from the Brushy Creek Wastewater Treatment Plant has been considered to this point, and this option may not be selected as one of the preferred options to achieve no net loss within the Colorado River basin. The diversion could either be piped directly from the plant to a tributary of the Colorado River, or a portion of the flow down Brushy Creek could be captured and piped to a tributary of the Colorado River. In either case, the projected flow in Brushy Creek is not expected to change significantly from the current flow. The water that would be piped to the Colorado would be based on water supplies that originated either in the Colorado River basin or as groundwater. These water sources now only constitute a portion of the return flows in Brushy Creek, as much of the flow originates as water supply from Lake Georgetown. Similarly, future wastewater return flows that originate from Lake Georgetown or as water transferred to Lake Georgetown from Lake Stillhouse Hollow cannot be diverted to the Colorado River. In addition, the wastewater return flows that will originate from Georgetown/Stillhouse Hollow are expected to increase significantly in the future as Round Rock, Brushy Creek MUD, and others expand or build new water treatment plants to supply water from these lakes. As a result, the flow in Brushy Creek may continue to increase even though a portion of the flow may be diverted to the Colorado River basin.

**Date replied:** 07/07/04

**Evaluation form sent out:** Yes (please see attachment)  
No (please see explanation below)

**Reply to the evaluation form:**



### **Question Tracking Form #3**

**Name:** Gary Newman

**Address:** 5353 Williams Dr. Georgetown, TX 78628

**Phone:** (512) 9306701

**Question:** If we embark on a 30-year campaign to laser level rice farms and spend the capital to do so, how will we know the water will be given up (sold back)?

**Date received:** 07/08/04

**Expert referred:** Robert Adams, CH2M Hill

**Reply sent out:** As with any water conservation technique, current water management practices will need to be modified to realize the maximum potential benefit. The concept developed for implementation of this strategy will require some participation or initial investment from the farmer, so that he has a vested interest and an incentive to recoup his investment through reduced production costs. It is hoped that reduced water use and the associated cost savings would be sufficient incentive for farmers to modify their water management practices enough to realize the planned water savings. For the laser land leveling strategy as for other water replacement strategies, there will be a monitoring and reporting component to verify that the targeted levels of water conservation are being achieved. The details are not fully worked out as to how this would be implemented, but the intent would be to use the monitored and reported information to make adjustments in the implementation program over time to ensure that water as you say will be "given up."

**Date replied:** 07/08/04

**Evaluation form sent out:** Yes (please see attachment)  
No (please see explanation below)

**Reply to the evaluation form:**

## Question/Comment Tracking Form #4

**Name:** Jennifer Walker, Program Assistant, Lone Star Chapter, Sierra Club

**Address:** Lone Star Chapter, Sierra Club  
PO Box 1931  
Austin, Texas 78767

**Phone:** (512) 477-1729

**E-mail:** jennifer.walker@sierraclub.org

### **Comment:**

HB 1437 provides for an interbasin transfer of up to 25,000 acre-feet per year of water to Williamson County. The bill states that the customer for the water must pay for the water and the costs of mitigating **any adverse effects** from the transfer of the water to Williamson County from the Colorado River watershed. This bill also requires that the transfer must result in no net loss of water to the Colorado River watershed.

A list of several options has been presented to cover the no net loss requirement of HB 1437. There are several strategies involving on-farm water conservation. The idea is to conserve a certain amount of agricultural water (grow the same amount of crops with less water) and then export that amount of water to Williamson County. There are several problems with this scenario.

- If you conserve water in the lower basin and export it from the upper basin you lose all the beneficial effects of the water flowing down the river to its original diversion point. According to the text of HB 1437 the receiver of the water is to pay the cost of mitigating **any** adverse effects resulting from the water transfer. Losing flow anywhere in the basin is an adverse effect and needs to be mitigated. Thus, for example, replacement water should be replaced close to the diversion point.
- Calling conserved water a “replacement” for water that will leave the basin is inaccurate. The water that will go to Williamson County will leave the river basin and will not provide the benefit of environmental and return flows in the Colorado watershed. This water will be leaving the basin never to return. Conserving water means that there is a reduced demand for water. It does not mean that water has been replaced. There will still be less water in the basin after water is sent to Williamson County even if water is conserved elsewhere in the basin. That means that there will be a loss of water to the Colorado River basin.
- Water for rice farming is provided for by LCRA with interruptible water. The water that will be going to Williamson County is firm water. According to the presentation by the LBJ School, the water replacement strategy needs to be dependable every year, even during a drought of record. We agree. Because interruptible water, by definition, does not fit this criterion, attempting to offset the use of firm water through conservation measures related to use of interruptible

water would necessarily be inadequate, even apart from the other shortcomings of a conservation-only approach.

- If on-farm conservation is used, the program should not rely on programs such as EQIP (with its incentives funded by taxpayers) to cover part of the cost of mitigating the water transfer. At minimum, water customers seeking mitigation credit should be required to demonstrate that the conservation measures for which credit is sought would not have occurred without the funding resulting from HB 1437. Otherwise, in terms of offsetting the loss of use, there will have been no benefit to the Colorado watershed.

There are several proposed options involving use of groundwater to replace the surface water that will be exported. This assumes that no net loss in HB 1437 means no net loss of surface water. HB 1437 expressly refers to “surface water” in several places. However, in creating the obligation for “no net loss,” the legislation expressly refers to no net loss of “water for the Colorado River watershed.” The term is not limited to “surface water.” Even, if the express language of the legislation is ignored, in order to ensure no net loss of surface water one would have to determine whether groundwater withdrawals will affect springs or whether the aquifer in question contributes to surface water flow in any way. Any reduction in contribution from the aquifer to surface water would violate the “no net loss” requirement. Any use of groundwater for this project should be done sustainably according to the hydrology of the individual aquifer.

Do the entities in Williamson County have successful conservation programs? Before any interbasin transfers are performed, the receiving entity should have a program in place to achieve the highest practicable level of water conservation.

It appears from many of the proposed water replacement strategies that the LCRA is aiming for no net loss of consumptive use of surface water. However, at face value, “no net loss” means no loss of actual water to the basin. Therefore, if you take a bucket of water out of the Colorado River basin, you need to replace it with another bucket of water (preferably at or near the point where it was taken out). This is what we would like to see in regards to this proposed water transfer.

**Date received:** July 15, 2004

**Expert referred:** Robert Adams, CH2M Hill

**Reply received:** It seems to me that their interpretation of the law is in absolute terms-- one gallon out is one gallon in. Water resources can seldom be evaluated in such a discrete fashion. There are many factors that need to be considered in the management and use of water. They also assume that change is always bad. There may be some seasonal changes in flow and/or bay inflow that could be viewed as good. The answers to those questions, however, are well beyond the scope of the current work. The studies

being performed as a part of the LCRA-SAWS Warder Project seek to answer many of these questions. When the answers are available, we hope to be in a position to respond as to whether the HB 1437 projected change in flows will create a negative impact.

**Reply sent out:** Based on the expert reply a thank you note was sent out from the LBJ School. The comment was also sent to LCRA for further responses. Please see attachment for LCRA's response letter.

**Date replied:** July 19, 2004 (LBJ School's response); August 24, 2004 (LCRA's response)

**Question Tracking Form #5**

**Name:** Isaac W. Norman

**Address:** 12500 FM 1660 Taylor, TX 76574

**Phone:** (512) 352 3056

**Question:** If “Brushy Creek Return Flow” is implemented, will an environmental impact study be made? I am not online; therefore, please furnish me hard copies of everything published.

**Date received:** 07/19/04

**Expert referred:** Robert Adams, CH2M Hill

**Reply sent out:** Yes, like many of the water replacement strategies, the Brushy Creek Return Flow water replacement strategy will require environmental studies before implementation.

**Date replied:** 07/26/04

**Evaluation form sent out:** Yes (please see attachment)  
No (please see explanation below)

**Reply to the evaluation form:**

## Question/Comment Tracking Form #6

**Name:** David Wheelock, Principal Engineer, BRA

**Address:** Brazos River Authority  
4600 Cobbs Drive P.O. Box 7555  
Waco, Texas

**Phone:** 254-761-3100

**Fax:** 254-761-3215

### **Question/Comment:**

The Brazos River Authority (BRA) appreciates the Lower Colorado River Authority (LCRA) facilitating the effort to define “no net loss” to comply with HB 1437 and to determine strategies to achieve the definition. We also appreciate the partnership and good working relationship we have with the LCRA in the BRA — LCRA Water Alliance (Alliance) in Williamson County. The BRA has attended and provided comment at the stakeholder meetings held in Wharton, Burnet, and Georgetown regarding HB 1437. This letter provides our written comments regarding the definition and application of “no net loss”.

I want to begin by acknowledging the BRA’s record of working with and for Williamson County entities over the past 30+ years to meet the county’s needs. Most recently BRA and LCRA have been working together to meet water needs as exhibited by the co-sponsorship through the Alliance of the Williamson County Water Supply Plan, produced in 2001. This plan defined how water supply from the Colorado River basin could meet some of Williamson County’s projected needs. As defined in the 2001 Water Supply Plan, additional water is needed by Williamson County and BRA is studying ways to increase supplies from existing reservoirs and facilities, as well as beginning to implement new groundwater supplies.

At present — BRA continues to work with and for Williamson County entities in the following ways:

- Development of new drought-proof groundwater supplies;
- Development of regional water systems in eastern Williamson County;
- Development of regional wastewater systems and reuse initiatives;
- Partnering with LCRA in the Alliance; and,
- Participation on the statewide Water Conservation Task Force (along with LCRA) to work toward most efficient use of available water supplies.

I hope I’ve demonstrated BRA’s continuing commitment to meeting Williamson County’s water needs — as part of that commitment, we appreciate the care that LCRA is taking to best implement the provisions of HB 1437. The decisions to be reached by the LCRA Board have significant implications to Williamson County and on-going implementation issues to your water users. The following are our comments on the implementation of HB 1437 — particularly the definition of “no net loss” and criteria to be used to compare possible implementation strategies.

a. Regarding the definition of ‘no net loss’ – HB 1437 requires there to be ‘no net loss’ from the Colorado River basin, however, it does not require ‘no loss’ — we feel it is an important distinction that ‘no net loss’ does not mean ‘no loss’. BRA advocates the meaning of ‘no net loss’ to mean no impact to the users of the water. To expand on this thought - the water to be diverted to Williamson County currently exists as firm yield in the Highland Lakes system; the users of that water are the rice growers in the lower basin who buy it as interruptible water; ‘no net loss’ to the users (i.e. rice producers) would mean sufficient water for equivalent production of rice. The definition and implementation of ‘no net loss’ should be applied to agricultural use in the lower basin.

BRA proposes this definition of ‘no net loss’:

i) The provision for alternative water supplies and/or water conservation practices that, when taken in aggregate, replace in ‘real time’ outflows from the Colorado Basin to Williamson County under HB 1437.

(1) ‘Real time’ shall be considered to mean an appropriate averaging period consisting of 12 months.

(2) Alternative water supply is the volume of water conserved or supplied specifically for use by irrigators to comply with HB 1437. Outflow is the volume diverted from the Highland Lakes to Williamson County users authorized under FIB 1437.

ii) The means and measures to conserve or supply replacement water for the diversions to Williamson County shall be in-place, operable, and confirmed in their ability to conserve or supply the assumed volumes of water prior to any outflow to Williamson County.

b. Regarding the consideration of strategies to achieve no-net-loss, we make the following comments:

i. Cost of the strategy should be a prime consideration — implement an economical solution;

ii. Ease of implementation of the strategy should be considered — it should be straightforward to implement the solution and simple to verify implementation;

iii. The effort, cost, and time required to obtain required permits for the strategy should be considered; and,

iv. The strategy should be able to vary in scale — as needed to match the amount of Colorado water activated for transfer.

Thank you for your careful consideration of these comments and we look forward to working with you through the remainder of this process.

**Date received:** July 19, 2004

**Expert referred:** John McLeod

**Reply sent out:**

**Date replied:**

**Evaluation form sent out: Yes (please see attachment)**

**No (please see explanation below)**

**Reply to the evaluation form:**

## Question/Comment Tracking Form #7

**Name:** Chris Lippe, P.E., Director, Austin Water Utility

**Address:** Austin Water Utility

**Phone:** (512) 972-0108

P.O. Box 1088

Austin, TX 78767

### **Question/Comment:**

In response to your request for public input on the definition of “no net loss” and strategies for water replacement to fulfill the no net loss requirements of HB 1437, we have reviewed available information. The bill, passed by the Texas Legislature in 1999, authorizes LCRA to transfer up to 25,000 acre-feet of water per year to Williamson County, an interbasin transfer to the Brazos River basin, under specific conditions.

For your consideration, attached are our comments, related to the definition of “no net loss and the water replacement strategy determination process. As the water supplier for the largest population base in the Colorado River basin, and as a significant water right holder, we feel Austin should be more involved in the transfer planning process to ensure that the transfer meets the following two key requirements of the bill itself:

- Any adverse effects of the transfer of surface water to Williamson County from the Colorado River watershed are mitigated, and
- The transfer results in no net loss of water to the Colorado River watershed.

We appreciate the opportunity to provide this input as you proceed with the water transfer to Williamson County provided for through HB 1437. Should you have any questions please contact me at (512) 972-0108. My staff and I are readily available to discuss these comments.

Austin Comments on HB1437 “No Net Loss” and Water Replacement Strategies Determination (July 29, 2004)

1) No net loss should be taken literally, that is, demand-side management, such as water conservation, should not be considered an adequate substitute for the exported water. The absence of the present or future need for one gallon of water in one basin should not cancel out the exportation of a gallon out of the basin. HB 1437 itself states that the transfer can be made “provided such transfer results in no net loss of water to the Colorado River watershed”.

- a) As a finite resource, the physical presence of water in the basin of origin has more value to that basin than does the lack of need for that water, at a particular point in time,
- b) Water conservation is typically one of the most cost ways to extend water supplies. It should be available for users as a demand- side management strategy for in-basin water management.
- c) If all stakeholders agree that conservation measures are acceptable, it must be recognized that conservation measures will require on-going

maintenance/investment to realize savings. Laser land leveling for agriculture, for example, must be maintained to have lasting water savings impacts. Even if such a substitution is valid for an initial conservation implementation project, it may be short-term in nature, not having the lasting value of water. Sequential conservation projects may be necessary decades if not hundreds of years into the future to achieve the no net loss requirement. In addition, conservation measures should be implemented in close proximity to where the out of basin withdrawals occur in order to balance water flows within the basin.

2) Austin is concerned that the water exports and certain water replacement strategies could adversely impact Austin's water rights, which include its return flows. HB 1437 specifies that an additional charge will be used to pay the costs of mitigating any adverse effects of the transfer of surface water to Williamson County from the Colorado River watershed. Those adverse effects need to be well understood when developing potential mitigation strategies. Austin should specifically be included in the process of determining which strategies meet the no net loss criteria and determining how any adverse effects will be mitigated.

3) Additionally, Austin is concerned about the potential for the future exportation of volumes in excess of the 25,000 AF allowed by HB 1437, in terms of the potential adverse Impacts on Austin's water rights and on the basin in general.

4) The timing of the transfers and compensation should be managed in a fair and reasonable manner, For example, compensating the basin of origin only in wet years when the basin of origin does not need the water would be unacceptable.

5) The variations in value of the transferred water between wet and drought years must be accounted for in the compensation plan.

**Date received:** July 30, 2004

**Expert referred:** John McLeod

**Reply sent out:** Please see attachment for the reply sent out.

**Date replied:** August 10, 2004

**Evaluation form sent out:** Yes (please see attachment)

No (please see explanation below)

**Reply to the evaluation form:**

## **Question/Comment Tracking Form #8**

**Name:** Cole Rowland, President, Highland Lakes Group

**E-mail:** colerowland@austin.rr.com

### **Question/Comment:**

I have made a few revisions to the draft of a no net loss definition that you distributed to the group in Wharton last Thursday. From the lakes' point of view, most of the principals in the HB1437 contract will be winners. The rice farmers will have significant capital invested in their fields at no expense to themselves, and their operating cost will be reduced in the future. Winners. LCRA will have a large, new water customer. Clear winner. BRA will have supplied a growing part of their water service area with water from a source with significantly lower transportation costs than they could have provided themselves. Another winner. The cities of Williamson County have a water source otherwise unavailable to them that provides cheaper and more reliable water supplies than their other alternative sources. Still another winner. Lakes Travis and Buchanan are the only principals in the HB1437 contract that may be losers. The best they can hope for is that they stay whole. There is very little chance that they will be any better off as a result of the water transfers and mitigation, but there is a real chance of their being damaged. At least two ways that the lakes might be damaged come to mind. One is that the estimates of water volume conserved per acre of land laser leveled may be overestimated, so that the actual demand reduction is less than the water transferred. Another one is that the no net loss phrase in HB1437 will be defined in such a way that there will be a time lag between transfers and mitigation, thereby lowering lake levels in the interim. I don't believe that the intention of the bill writers or of LCRA is to disadvantage the lakes as a result of the transfers to Williamson County. But that will happen unless your definition specifically addresses the impact on the lakes of the transfers and mitigation. My suggested changes do that, and I hope that you will give them your most serious consideration. Please acknowledge.

### **No Net Loss: Definition, Outcome, and Implementation**

- The definition of no net loss is that: (a) there should be no net loss of surface water to the Colorado River watershed and (b) water replaced should at least be equal to the water transferred in a 12-month year.
- No net loss will assure that:
  - water right holders can access their water rights without any change
  - water will remain available in the Colorado River basin for release to maintain instream flow requirements and estuary release requirements to assure viability of plants and animals in the Colorado River basin, its estuary and bay
- Implementation of "no net loss" requires a mitigation plan that provides replacement water to the Colorado River watershed sufficient for up to 25,00 acre feet per year.

- The mitigation should compensate the Colorado River watershed for the volume of water exported.
- The replacement strategy should include a monitoring and reporting system.

\* \* \* \* \*

### **Recommended revision of definition**

- The definition of "no net loss" is: water transferred out of the Colorado River basin in accordance with the terms of HB1437 shall be replaced and/or conserved in any twelve month period in a quantity, measured monthly, that is equal to or greater than the quantity exported.
- No net loss will assure that:
  - water right holders can access their water rights without any change
  - water supplies will be unaffected by the water transfer and mitigation, and the volume of water for satisfaction of environmental needs will be maintained.
  - Lake levels in the reservoirs will remain as high as they would have been without the HB1437 transfers and mitigation.
- Implementation of "no net loss" shall provide a mitigation plan that provides replacement and/or conserved water to the Colorado River watershed sufficient to replace transfers or reduce irrigation demand by as much as 25,000 acre-ft./year.
- The mitigation plan shall provide to the Colorado River basin a volume of water equal to or greater than the volume exported, measured monthly, within any twelve month period.
- The replacement strategy shall include a monitoring and reporting system.

**Date received:** August 22, 2004

**Expert referred:** John McLeod

**Reply sent out:**

**Date replied:**

**Evaluation form sent out:** Yes (please see attachment)

No (please see explanation below)

**Reply to the evaluation form:**