CTWC Comments on LCRA Draft Water Conservation Plan

The Central Texas Water Coalition (CTWC) appreciates this opportunity to provide input regarding the LCRA's draft 2014 Water Conservation Plan (Draft WCP). We applaud the LCRA's efforts to promote water conservation. However, the onus of conservation efforts continues to fall to firm customers while conservation efforts by agricultural irrigation users have failed to produce significant results. We do recognize the potential for water savings through drip irrigation for municipal users and would support any efforts that help conserve our precious resource.

Conservation efforts should be leveraged so that strategies implemented produce the greatest water savings. This is not currently happening, nor does the Draft WCP address this inadequacy. Specifically, in years in which their supplies are not curtailed, agricultural irrigation users use up to three times the amount of water as all firm customers combined. Thus, selecting and implementing effective conservation strategies in the high-water-use agricultural irrigation sector should yield overall water savings in much greater amounts than the much smaller firm water use sector. Instead, it appears that conservation efforts implemented in the agricultural irrigation sector have failed to produce any significant water savings. Rather than continuing to pursue ineffective conservation strategies, LCRA must reevaluate and redesign the WCP in 2014 to include strategies that produce real results.

The Proof is in the Pudding: Existing Strategies Have Failed to Produce Actual, Significant Water Savings in the Agricultural Irrigation Sector

According to the Draft WCP, since 1989, LCRA estimates annual savings in the agricultural irrigation sector of 41,500 acre-feet due to volumetric pricing and canal rehabilitation: 25,000 acre-feet due to House Bill 1437, between 6,200 and 9,800 acre-feet due to agricultural conservation projects such as gate rehabilitation, total savings during 2 crops is estimated to be .46 acre-feet/acre for land leveling. The original goal of land leveling was to produce a savings of .75 acre-feet/acre of water. HB1437 program is based on saving water that is to be transferred to the Brazos River basin so there is NO net loss to the Colorado River Basin. HB1437 program seems to have fallen short of its goal. Based upon information provided by the LCRA, these agricultural irrigation efforts are estimated to be saving around 90,000 acre-feet per year since 1989.

Those estimated savings sound great, but unfortunately, it appears they are only theoretical. In fact, water use by the agricultural irrigation sector in non-curtailment years has remained the same despite all of these measures. In 1990, 83,581 acres were irrigated with 422,707 acre-feet of water (5.06 acrefeet per acre). In 2011, 84,520 acres were irrigated with 464,314 acre-feet of water (5.49 acre-feet per acre). Not only are those savings of 90,000 acre-feet per year not reflected in the actual data, the peracre usage increased.

Savings on paper are a good start, but not good enough. The savings must show up in the final usage numbers.

Agricultural Irrigators Must Be Held Accountable for Reducing Actual Water Use by Claimed Savings

Multiple sources have cited anticipated water savings of 25-30% through more effective farming techniques since the 1989 adjudication set a limit of 5.25 acre-feet per acre for this use. And yet, according to the LCRA's data, these savings have not been realized. The Gulf Coast irrigation division, for example, used well in excess of the 5.25 acre-foot limit in 2009 and 2011.

CTWC agrees that better farming techniques can produce significant savings. However, rather than simply making claims of savings, the agricultural irrigation sector should be held to a reasonable schedule of benchmarks to ensure progress. The old 5.25 acre-foot per acre limit should be reduced now by as much as 25-30% to reflect 25 years of progress in farming techniques since 1989. Then, the limit should be steadily decreased over time as more effective farming techniques are implemented.

Based upon current data, it appears that the expected water savings from more efficient farming techniques will only be realized on the bottom line if agricultural irrigators are held to a reasonable water-use limit that reflects increased efficiencies. These measures and associated savings should be clearly reflected in the Water Management Plan, with commensurate reductions in available water as defined in the curtailment curves.

Water Supply Pricing is the Most Effective Way to Produce Actual, Significant Water Savings

One of the most effective ways to realize water conservation is to incentivize conservation through pricing. By charging more for water usage in excess of the amount reasonably necessary to achieve the purpose for which the water is intended; the LCRA can encourage water users to do everything in their power to reduce their water use and waste.

Instead, LCRA's current water pricing heavily subsidizes interruptible water, shifting the burden of providing that lost revenue onto the firm customers. There is insufficient incentive for interruptible customers to reduce their water use and waste.

CTWC understands that LCRA is in the process of revising its water rates for all user classes and the proposed rate structure is currently under public review. CTWC appreciates the opportunity to participate in that process. While steps have been taken in the right direction – toward full cost recovery – more must be done to balance rates so that they are fair and non-discriminatory between firm and interruptible users. An example of the discrimination and unfairness between rates is that firm customers are asked to pay 100% cost recovery, while interruptible customers are only asked to pay a small percentage of the full cost in LCRA's latest proposed rates. These proposed rates still show LCRA unfairly and unjustly subsidizing interruptible customers.

Compliance with the legislative mandate regarding fair and non-discriminatory rates will have the added benefit of incentivizing conservation by the users of the vast majority of lower Colorado River basin water. A revision of water rates currently underway presents several opportunities in this regard.

In recent years, large amounts of water have been called for but not diverted by the irrigation districts. Because they did not divert this water, the districts were not charged for it. The new rate structure

must require payment for all water called for from storage, whether or not it is diverted, to discourage this kind of wastefulness and promote accountability by the irrigation districts.

Additionally, large amounts of water continue to be lost to seepage in delivery. Canal lining can make a big difference. However, irrigators have not adequately prioritized and invested in canal lining, despite its huge potential to save the state's water, because the LCRA has not charged irrigators for delivery losses incurred in transit to the irrigators' diversion points and in the canals. Until these delivery losses result in a commensurate financial cost, there is insufficient incentive for irrigators to invest in mitigating efforts such as canal lining. The new rates must create a balance that incentivizes investment in conservation.

Higher surface water rates will also promote conjunctive use of groundwater by the irrigation districts. The Lower Colorado Regional Water Planning Group (LCRWPG)(Region K) 2011 Water Plan estimates the potential of 62,000 acre-feet of water supply per year from groundwater, but there is little incentive to make these investments and utilize groundwater if surface rates are held too low. However, on a very positive note, increasing water rates to stimulate and realize all the proposed irrigation water management strategies, as identified in LCRWPG 2011 Water Plan, could have a dramatic positive impact on reducing surface water demand, and help sustain the irrigation districts at their current acreage in an environment of reduced surface water availability.

The same logic applies to many of the irrigation water management strategies identified for rice farming in the LCRWPG 2011 Water Plan. Appropriate pricing of surface water would help to spur investment necessary to achieve the goals identified in the LCRWPG 2011 Water Plan of 34,150 acre-feet per year from on-farm conservation and 40,800 acre-feet per year through development of new rice varieties, as shown in Table ES.13 of that document.

The Draft WCP states that firm water rates must be "cost-based and not encourage the excess use of water." (Sec. 3.5). There is absolutely no reason this requirement should not be applied equally to interruptible water rates.

Appropriate Pricing Will Have the Added Benefit of Funding Important Conservation Projects

One mile of unlined canal can lose up to 1,690 acre-feet of water per year to seepage. Lining those canals, or even the most critical portions of them, would produce significant water savings. According to Section 4.4 of the Draft WCP, LCRA plans a pilot lining project in select segments of the Gulf Coast Irrigation Division identified as highest priority, with the possibility of a larger lining project within 10 years. However, the Draft WCP does not include details regarding paying for the pilot or potential larger lining projects. Such projects could result in major water savings – the LCRWPG 2011 Water Plan identifies the potential for savings of 65,000 acre-feet per year that could be realized through implementation of irrigation district conveyance improvements (LCRWPG 2011 Regional Plan at Table ES.13).

One major impediment to canal lining is cost. Additional funds collected through appropriate pricing, as discussed above, can be used to fund the lining of miles and miles of canal throughout the irrigation divisions. This would ultimately benefit the irrigator, who can call for and thus pay for less water. It would benefit all water users in the basin by making more efficient use of the shared resource.

Canal lining is only one example of a conservation measure that could be implemented with the assessment and collection of adequate water rates. With a source of funding provided by water rates paid by interruptible users, other projects, such as automation and modernization of gates, could be implemented quickly and throughout the irrigation divisions, not just by 2019 in the Gulf Coast Irrigation Division.

We believe that conservation is among the highest priorities during this historic and unprecedented drought. With the continued recorded low inflows and unknown end to this drying weather pattern, our water supply is of highest importance.

"Working for Creative Water Solutions"

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"We cannot solve our problems with the same thinking we used when we created them." Albert Einstein