



VIA EMAIL TO LCRAWMP@lcra.org

June 20, 2018

**CENTRAL TEXAS WATER COALITION'S COMMENTS
ON LCRA'S MAY 2018 DRAFT TECHNICAL PAPERS
PREPARED FOR UPDATE OF 2015 WATER MANAGEMENT PLAN**

The Central Texas Water Coalition (CTWC) greatly appreciates the opportunity to provide these comments on the Draft Technical Papers that LCRA has developed in conjunction with its work toward the preparation and submittal of its next Water Management Plan (WMP).

GENERAL OBSERVATIONS AND QUESTIONS:

1. What is the objective of LCRA's development and application of a "weather-varied" methodology to calculate Demands for various types of water uses? To assist our understanding of the impacts of these proposed numbers and methods, would you please provide a reference chart that compares the Demands proposed under these Draft Technical Papers against: 1) the Demand assumptions used in the 2015 WMP; and 2) to the extent they are comparable, to the Projected Demands approved by the Texas Water Development Board (TWDB) for use by Region K?
2. How does LCRA's "weather-varied" methodology account for the trend toward warmer temperatures that this region is experiencing? How does the methodology recognize and adjust for the extremely low inflows to the Highland Lakes that are now the "new normal"?
3. How is LCRA using the findings and conclusions of the August 2017 "Evaluation of Rainfall/Runoff Patterns in the Upper Colorado River Basin," prepared for the TWDB by the Kennedy Resource Company, to adjust for the alarming declines in inflows to the Highland Lakes?
4. Will LCRA be using reduced inflows in its Water Availability Modeling to reflect the harsh reality of the present situation in the watersheds that feed the Highland Lakes? In the last few days, the LCRA River Operations Reports have indicated that gauged flows upstream of Lake Buchanan are ranging from 0 to 19 cubic feet per second. Such horribly low numbers should have significant consequences in the development of this WMP.
5. Where do you account for potential Emergency Hydroelectric Releases?
6. How do you account for orders placed by Agricultural Interruptible customers that are not diverted when it passes by the irrigation division's diversion point on the river, leaving those volumes of water available to be "re-ordered"?

7. How does LCRA utilize water pricing as a method to encourage conservation and reduce demands?
8. What is the total volume of water allocated under Firm Domestic Use Contracts on the Highland Lakes? What is the total volume of water held under Firm Domestic Contracts that are not diverting from the Highland Lakes? The observed growth and development around the Highland Lakes suggests that these numbers are trending upward at a noticeable pace, and it would be helpful to confirm that the Draft Demand numbers for these customers is generous enough to account for the apparent increase in Domestic Use Contracts.
9. How is the 50,000 acre-feet/year LCRA Board “Reserve” accounted for in the Demand numbers described in these Technical Papers? What is the purpose of the Board Reserve number?

SPECIFIC COMMENTS ON DRAFT TECHNICAL PAPERS:

Development of Projected Agricultural Demands by Downstream Irrigation Operations

It is unclear how LCRA’s Draft Downstream Agricultural Demands compare to the Region K 2020 Demands, since the Region K Irrigation Demand Projections appearing in Table 1 of this Draft Paper appear to be presented somewhat differently from the tables that were discussed by the Region K Population and Water Demand Committee. If LCRA can provide a reference chart to facilitate the comparison and understanding of its latest Demand proposals, or, if LCRA can point us to the identical “Table 1” within the Region K documents, that would be very helpful.

Please provide information on the estimation of and accounting for the conveyance losses that occur between the point where stored water is released from an upstream reservoir to the point that the water is diverted from the river. In other words, what is the magnitude of the conveyance losses for releases of stored water from the Highland Lakes? How is LCRA compensated for the value of the water that is lost along the way?

In its development of Table 2 of the Draft Paper, LCRA briefly describes the components of its demand methodology for Downstream Agricultural Operations, but it is not clear that such calculations could be validated or repeated without more information. Most importantly, the Total Demands presented in Table 2 are huge numbers (indicating a maximum total annual demand of 422,001 acre-feet/year), likely exceeding the Combined Firm Yield of Lakes Buchanan and Travis, and possibly calculated without assurance that such water will be used beneficially and without waste. It is unclear whether such water would be supplied from the storage reservoirs or from LCRA’s run-of-river water rights. Although LCRA proposes to respect the maximum year demands that Region K is using for this Water User Group as an upper limit on its own demand projections, CTWC remains concerned that Region K’s Agricultural Demand numbers are far too high to be used as guidance in this process.

Development of Projected Firm Demands for Municipal and Other Firm Uses (excluding Power Plants)

Several of the projected water demands for LCRA's Firm customers seem to be understated, including: 1) the City of Cedar Park (recently approved contract for 20,500 with optional 2,500 acre-feet; but listed as having a 20,000 acre-feet/year demand in the year 2025); and 2) Domestic Use on Highland Lakes (listed as 5,100 acre-feet/year in 2025, but existing Domestic Use customers (grouped with other small or temporary customers) is already reported as having contracts for 4,574 acre-feet/year (perhaps these other customers are not located on the Highland Lakes?).

It does not seem appropriate to "mix" the City of Austin's average and high-use Demand projections by using the Austin Water Forward numbers AND the Region K numbers, respectively. These two numbers were derived in very different ways, and it does not seem technically correct to choose them for this purpose without converting them into comparable numbers. We recall that the City of Austin representatives on Region K expressed concerns about the inadequacy of Austin's projected demands in view of its continuing economic and population growth, and the City raised concerns about other aspects of the Municipal Demand methodology utilized by Regional Water Planning Groups. The City of Austin's water customers have been conserving water, and we expect that to continue, but Austin should not be singled out and selectively chosen as an entity with lower water demands until Austin's representatives confirm that such a projection is reasonable and justified.

As with the other Demand projections, it would be extremely helpful to have a reference table to compare the numbers derived using LCRA's proposed methods against the Demands presented in the 2015 WMP and in the working draft of the 2021 Region K Plan. We are concerned that the new methodology allows LCRA to lower the projected Demands for Firm customers in ways that could threaten the long-term sustainability of water supply in this river basin.

In addition to these comments, we would appreciate your response to these questions:

1. Why was the period from 2012 to 2016 chosen for Municipal Demand Projections? During most of that time period, LCRA's Firm customers were operating under restrictions or prohibitions on outdoor watering due to the continuing drought. As a result, Municipal and Manufacturing customers may have reported artificially low demands.
2. According to the Summary Table of "Preliminary Projected 2025 Demands," it appears that LCRA is proposing to rely on water use numbers since 2010 as the basis for its high-use demands for the non-City of Austin Municipal/Manufacturing customers not individually reported in the Region K planning work. Please explain how this approach will protect the future demands of these Firm customers, since water use was curtailed during many of those years.
3. Where is the discussion on Environmental Flow Demands? Where are these demands acknowledged as Firm commitments, possibly released from lake storage if needed?
4. Please provide a copy of the Technical Paper regarding the City of Corpus Christi water right that is referenced in this document.

Development of Projected Firm Demands for Power Plants

It is unclear why the volumes of water used by the various power plants exclude the demand in 2011 at some power plants and include the year 2011 at others. The Decker and Fayette Power Plants diverted very high volumes of water in 2011, yet the year 2011 is not used in LCRA's calculation of a minimum annual demand level. Please explain the basis for that decision, which apparently lowers the demand projections for these power plants. We are not aware of weather-related circumstances that would justify omission of 2011 data. If the power plants diverted unusually high volumes of water in 2011 because such water was being released from storage for LCRA's downstream agricultural irrigation customers, this interrelationship should be explained.

Again, thank you for the opportunity to provide comments on these Draft Technical Papers, and we look forward to obtaining answers to our questions at your convenience. As it develops its Demand numbers, we urge LCRA to take a very conservative approach, so that sufficient Firm Water supplies can be reliably provided in times of epic drought. In other words, Firm Water Demands should err on the side of being overstated, not underestimated. Please call me at 512-755-4805 if I can be of assistance in this process.

Sincerely,



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