

CWIC
Colorado Water Issues
Committee
of the
Texas Rice Producers
Legislative Group

2511 San Bernard Drive
East Bernard, TX 77435
979-758-4670

Appointed Members:

Lakeside
Ronald Gertson (Chair)
Bryan Wiese

Garwood
Kenneth Danklefs
Billie Heffner

Pierce Ranch
Laurance Armour III
Andrew Armour

Gulf Coast
Paul Sliva
(Vice-Chair)
Daniel Berglund

The Purpose of CWIC:

Facilitate the availability of
Colorado River water
supplies for rice production
in the four major irrigation
operations on the Colorado
River.

Dear LCRA WMP Revision Staff,

October 29, 2018

This letter is intended as further formal public comment on the WMP revision in follow-up to the October 25 meeting.

1. **Minimum Combined Storage** – The model run for the October 25 meeting results in a Minimum Combined Storage (MCS) of nearly 660,000 AF. This is almost 10% above the 600,000 AF level for the MCS stated in the TCEQ framework. While we recognize the TCEQ intent is not necessarily to hit that 600,000 level exactly, the current run seems to be setting a much higher bar for the MCS. We also recognize that the COA insists that its high level of conservation should result in some form of “payback” in the Water Management Plan, and that this higher MCS should be that “payback”.

We are concerned over the precedent that could be set with this logic – that conservation by a firm customer should result in reduced water availability for interruptible customers. CWIC also argues that COA is not alone in its efforts to achieve meaningful levels of conservation. Many of the interruptible customers have accomplished major conservation improvements that are reducing their water use by 25% and more. These improvements can cost \$300 to \$500 per acre. It is estimated that over \$15 million of such improvements have already been implemented, and additional work is ongoing.

2. **Utilization of Unused, Allocated First Crop Water** – The LCRA staff have, so far, not allowed for the use of unused, allocated first crop water to complete the allocation of second crop water in years when there would otherwise be a second season curtailment. CWIC maintains that this is a viable management tool that falls within the TCEQ framework. Furthermore, the relatively high MCS in the current model run indicates there is considerable room for making more interruptible water available without infringing upon the intended reliability of firm water supplies, thereby inviting further consideration of this request.
3. **Safety Margin Creep** – CWIC is concerned that each successive WMP adds more and more safety margin for firm water users at the expense of water reliability for interruptible water users. CWIC understands that interruptible water supplies necessarily become less reliable over time as firm water contract holders grow into their contracts, and that the WMP is the tool for addressing this metamorphosis. The question that must be addressed with each successive WMP revision is whether the WMP maintains reliability of needed firm water supplies during a repeat of the drought of record, while also making maximum water (within historic limits) available for the users of interruptible water. This is the delicate balance for which the WMP was created. Discomfort of firm water customers is not reason enough to depart from this required balancing of the two categories of water users. The fact that WMP revisions are provided in five-year increments should provide ample opportunity to react to any unforeseen hydrologic changes not already contemplated in modeling scenarios. Such frequent, look-ahead opportunities are ample to account for potential changed conditions, negating the need to continue building into the WMP additional

safety margins not warranted by the current TCEQ framework and not presaged in previous iterations of the plan.

4. **Water Rates** – While we agree with LCRA staff that the WMP revision process is not the proper venue for addressing water rates, it has been distressing to us that others choose to use this process as a forum to repeatedly mischaracterize interruptible water rates as insufficient and disinclined to promote conservation. We offer the following facts to set the record straight: **1) Interruptible water rates start at over \$50 per acre-foot and escalate to over \$100 per acre-ft as use increases. 2) The total annual cost of LCRA interruptible water runs from tens of thousands of dollars per customer to well over \$100,000 for some customers. Those two facts combine for extreme incentive to conserve water, contrary to the false statements made by some during previous WMP revision meetings.**

Thank you for the ongoing opportunity to comment and participate in this critical process. And thank you to the LCRA for seeking to produce the best and fairest plan possible.

Sincerely,

Ronald Gertson

Chair, Colorado Water Issues Committee of the Texas Rice Producers Legislative Group

*Additional input of National Wildlife Federation, Texas Living Waters Project, Texas Parks and Wildlife Department, and Environmental Stewardship related to proposed revisions to LCRA Water Management Plan.
November 1, 2018*

The National Wildlife Federation, Texas Living Waters Project, Texas Parks and Wildlife Department, and Environmental Stewardship appreciate the opportunity to participate in the WMP revision process. After reviewing the latest modeling results, we have the following requests, comments, and questions. We will be reaching out to LCRA staff regarding an opportunity to discuss these issues.

Request for consideration of measures to alleviate reduced bay inflows

In reviewing the latest modeling outputs, we identified some large changes in bay inflows during several individual months in years of low total inflows. We would appreciate getting an explanation of what is driving those changes. With so many changes being modeled at once to accommodate the shortened revision process, we are finding it difficult to tease out the cause. We are very concerned about the predicted worsening of bay inflows especially during years of already low inflows and would like to explore options for minimizing that effect. Here are some examples:

May of 1956: inflows are now shown as 64,407 acre-feet compared to 93,098 acre-feet in the October 4, 2018 modeling, with total inflows for 1956 dropping from 244,758 acre-feet to 218,393 in the October 25, 2018 modeling.

September of 1980: inflows are now shown as 60,953 acre-feet compared to 100,974 acre-feet in the October 4, 2018 modeling, with total inflows for 1980 shown as dropping from 651,504 acre-feet to 625,274 acre-feet in the October 25, 2018 modeling—increased inflows in October 1980 helped to reduce the overall annual decrease.

November of 2000: inflows are now shown as 208,672 acre-feet compared to 288,839 acre-feet in the October 4, 2018 modeling, with total inflows for 2000 shown as dropping from 604,586 acre-feet to 535,496 acre-feet in the October 25, 2018 modeling.

Although there are some years of overall low inflows that show increases in total inflow with the latest modeling, there are more years with total decreases: of years with total inflows of less than 750,000 acre-feet, total inflows decrease in 15 years, including in the year of lowest total inflows, and increase in 11 years; and of years with total inflows of less than 500,000 acre-feet, total inflows decrease in 12 years and increase in 5 years. That seems to be moving in the wrong direction.

Request for salinity data

We would appreciate receiving monthly salinity calculations done for the October 4, 2018 and the October 25, 2018 model outputs. It is our understanding, based on the salinity results summarized in the modeling data, that LCRA is already performing those calculations. Having those monthly data would help us assess the impacts of inflow changes.

Status of commitment of firm yield water to help meet environmental flow needs

We would appreciate clarification of the status and amount of the commitment by LCRA of a portion of the firm yield to help meet environmental flow needs. We have understood early comments by LCRA staff to indicate the LCRA was not seeking to reduce its prior commitment, but we would appreciate clarification of where things stand.

Availability of presentation slides from discussion by David Walker

In response to earlier questions, David Walker, along with other staff of the River Operations Center (ROC), was kind enough to provide an overview of how operational decisions are made in providing releases to meet environmental flow needs. At that time, we requested a copy of the presentation slides. We certainly understand that for much of the time since that earlier presentation, staff of the ROC has been engaged in the herculean task of managing a massive flood and doing so in an extremely impressive manner. However, when possible, we would appreciate receiving the presentation slides.

Wharton subsistence flows

We appreciate the willingness of LCRA staff to discuss our concerns about allowing flows to fall below subsistence flow levels at the Wharton gage as a result of limitations on commitments of releases of stored water. However, those concerns persist and we request a commitment by LCRA to continue to closely monitor flows and environmental conditions at the Wharton gage and to revisit the issue during future revision processes. With the presence at that location of multiple species of native mussels that may well be listed as threatened or endangered species, the impacts of potential flow reductions merit ongoing monitoring and consideration. In addition, we would like to understand the impact of this change on LCRA's firm water commitment for helping to meet environmental flow needs—referenced above—particularly when considering the increase in the minimum combined storage level that initially drove this proposal and the continued decline in compliance with other environmental flow targets.

Pulse flow evaluation

Although not a topic that has received much attention during the current revision process, the role of pulse flows in maintaining ecological health is well established. We request an ongoing commitment by LCRA, building on the commitment included in the current WMP, to undertake an assessment of pulse flow occurrence in the Colorado River downstream of the Highland Lakes.

Approach for addressing exceptionally high direct bay rainfall

We understand that LCRA staff continues to be interested in developing language to be included in the updated WMP to allow inflow credit for exceptionally large rainfall events falling directly on Matagorda Bay. As previously expressed, we are willing to engage in those conversations and want to include discussion of a potential mechanism for carrying forward credit for a portion of forgone releases of storable inflows. Because it almost certainly will not be possible to complete discussions prior to the last scheduled participant meeting and because we do not believe any such approach will affect modeling results, we anticipate that the process of developing potential language will be part of ongoing discussions about specific WMP language, discussed below.

Process for arriving at revised WMP language

We would appreciate clarification of the process by which LCRA staff anticipates moving forward with development of the specific text of the revised WMP. Even as concepts are agreed upon during the ongoing public process, reducing those concepts to writing also has important implications and we consider it important to have the opportunity for continued participation.

We appreciate the willingness of LCRA staff to consider our concerns and look forward to continued discussions.



COMMENTS OF THE CENTRAL TEXAS WATER COALITION REGARDING LCRA'S PROPOSED UPDATES TO ITS 2015 WATER MANAGEMENT PLAN

SUBMITTED VIA EMAIL TO LCRAWMP@lcra.org

Thursday, November 1, 2018

The Central Texas Water Coalition (CTWC) appreciates the continuing opportunity to submit comments, questions, and items for discussion regarding LCRA's ongoing efforts to develop an updated Water Management Plan (WMP) for the operation of Lakes Buchanan and Travis. These comments include responses to matters raised during or after the most recent LCRA-hosted informational meeting on October 25, 2018. Please understand that these comments are not exhaustive, since the short time frame for submittal has limited the scope and depth of our comments.

Emphasis on Water Conservation

During the LCRA's WMP participant meeting on October 25th, there was some discussion regarding the value of water conservation and the impact of water conservation on water users in the entire river basin. CTWC has always advocated for conservation by all water users, and we agree that conservation is vital to the present and future availability of water in the basin. However, it appears that this WMP is being developed without scrutiny of the enormous volumes of water used by LCRA's Agricultural Interruptible customers.

We request that LCRA return to the basics of its Adjudication documents for a determination of the water use by its agricultural customers on an "acre-feet per acre" basis. This evaluation should include water used for irrigation of rice and other crops, applying the appropriate "duty" for each crop by acre irrigated. After gathering this information, LCRA should compare the results to the 5.25 acre-feet per acre duty for growing two crops of rice (measured at the diversion point on the Colorado River) that was utilized by the State when the irrigation water rights were originally issued in the late 1980s. This type of analysis would make the evaluation of the water conserved transparent to the LCRA and its stakeholders.

We are concerned that conservation by Firm Customers does not reflect in keeping water available for Firm Customers. If we are serious about incentivizing and sustaining conservation efforts by the Firms in the Upper Basin, they must see direct tangible benefits that are more protective.

The Importance of Fair and Reasonable Rates

The latest iterations of LCRA's water modeling, made in response to requests from the Colorado Water Issues Committee, indicate that the likelihood that agricultural

irrigation customers will receive a full-supply of Interruptible water for first and second irrigation seasons has significantly improved. This level of water supply reliability should not be undervalued by LCRA. We respectfully request LCRA's commitment to reevaluate the rates charged for this water in a manner that reflects its true value and the associated costs for providing it to these customers. We would expect the rates to increase significantly beyond the current rates.

Arbuckle Reservoir

CTWC has always supported the concept of an off-channel reservoir downstream, but it was with the understanding that the upper basin would also benefit by having less stored water released. *It is not clear exactly how the upper basin will benefit from this reservoir.*

Climatology

Climatologists, and now the general public, are fully aware of the impact of PDO/AMO cycles on drought probability in the Southwest and in Texas. For the WMP to ignore probabilistic inputs, tied to NOAA's ability to assess probabilities, could cast a negative light on the WMP planning process.

Recognizing this is a new approach, CTWC would like LCRA to consider a pilot program assessing best Climatology drought probability figures at least every six months and putting flexibility factors on the trigger points that appear in the plan. After this testing period, assess the effectiveness of this approach.

Questions

After attending and participating in recent WMP update meetings and discussions, we would appreciate further information in response to these questions:

1. Does the proposed, updated WMP allow more stored water to be released from Mansfield Dam for the purpose of providing it to Agricultural Interruptible customers than the existing WMP?
2. Will you please provide model outputs that provide estimates of lake elevations according to Combined Storage volumes in Lakes Buchanan and Travis?
3. Will you please explain LCRA's plans to monitor and enforce its management of "ordered but not diverted" Interruptible water that is released from storage in the Highland Lakes?
4. Will you please provide notices to all stakeholders when LCRA commences its Agricultural Irrigation Ratemaking activities in the next few months? Please allow meaningful public participation in this important function of water management.
5. As previously requested, would you provide an analysis of the current situation of the Firm Yield of the Highland Lakes versus the actual Firm Usage? We are concerned that the location of the actual diversion points of the Firm Customers should be incorporated in the Firm Yield calculation. How much of the 50,000 acre feet Board Reserve is available for the Firm Customers in the Upper Basin.

Addition of Ordering Provisions in Next WMP

1. Many of LCRA's presentations have referred to the next WMP as having a five-year duration. This should be incorporated into the WMP Application itself.
2. To address the assertions and concerns regarding the conservation efforts of LCRA's agricultural customers, please include a provision expressing LCRA's commitment to perform a detailed analysis of the on-farm water use by its Agricultural Interruptible customers, and to develop an acre-feet per acre "duty" for the crops irrigated. If its customers are supplementing their irrigation water with groundwater, the total volume of water should be reflected in the "duty" that is calculated.

In closing, we continue to urge LCRA to choose the more conservative option when performing water availability modeling and evaluating the alternatives for management of the water supplies that are so critically important to this region.

Respectfully submitted,
Jo Karr Tedder
CTWC President

COMMENT – LCRA WMP REVISION & NEED FOR DATA TRANSPARENCY

To:	John Hofmann, VP Water Operations Lower Colorado River Authority
From:	Jordan Furnans, PhD, PE, PG LRE Water, LLC
Date:	November 1, 2018

Dear LCRA,

After reviewing the various versions of WAM models developed during this 2018 WMP revision process, I am of the opinion that the modeling is sound. I have not performed a detailed and complete review of all aspects of the modeling effort, yet during my limited review I have found the models to be well developed, and when I did identify potential errors, LCRA confirmed and addressed them immediately. I applaud you for your efforts and ensuring modeling accuracy during this WMP revision process.

My remaining concerns regarding the WMP have to do with the ability to monitor LCRA water operations to ensure compliance with the WMP provisions. I believe it beneficial that LCRA make available all data needed to perform real-time or near-real time assessments of basin conditions and to provide stakeholders with proof that LCRA actions are in-step with WMP requirements. This is largely done with data included in the Daily River Report, which provides streamflow and lake level data, as well as releases and environmental flow tracking. However as the Daily River Report is not disseminated on the weekend, such data is not readily available on daily basis. I'd recommend the Daily River Report be disseminated every day of the week, or that the Monday report also contain release data pertaining to the previous Friday, Saturday, and Sunday. I'd also recommend that the Daily River Report contain daily net-evaporation estimates, assuming LCRA monitors evaporation and precipitation in a manner similar to that done by the Brazos River Authority and other entities throughout Texas.

I would also like clarification regarding the cumulative inflow test used to assess whether a drought is a DWDOR. It is unclear to me whether the inflows used in the calculation are based on 1) USGS gauged flows multiplied by reference factors, or 2) water balances around the Highland Lakes (computed based on known outflows, net evaporation, and change in storage). Clarification on this issue will allow me to better track an ongoing drought status and ensure my calculations agree with those made by LCRA.

Sincerely,



Jordan Furnans