

June 28, 2021

[VIA EMAIL TO RegionalWaterPlanning@twdb.texas.gov](mailto:RegionalWaterPlanning@twdb.texas.gov) AND sarah.backhouse@twdb.texas.gov

Ms. Sarah Backhouse
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Texas Water Development Board
P.O. Box 13231
Austin, TX 78711

RE: 2021 Regional Water Planning Rulemaking; Preliminary Input of Central Texas Water Coalition (CTWC) on Revisions to State Water Planning Guidance Principles and Water Supply Planning Rules

Dear Ms. Backhouse:

On behalf of the Central Texas Water Coalition (CTWC), a nonprofit organization advocating for responsible water management and conservation policies, thank you for the opportunity to submit preliminary input on possible revisions to the guidance and rules utilized by Regional Water Planning Groups in the development of their Regional Water Plans. Our comments below will generally follow the outline provided by the Texas Water Development Board (TWDB) in its May 20, 2021 letter to Water Planning Stakeholders. The topic or issue is repeated below, followed by CTWC's response.

Topics / Issues for Preliminary Input to TWDB

1. *What issues or dimensions associated with water supply planning are not currently addressed by the current state planning process?*

- In Regions that develop their plans according to the surface and groundwater management decisions and actions of a single water right holder, such as a river authority, the TWDB should require the Regional Water Planning Groups (RWPGs) to include an in-depth evaluation and discussion of the legal documents, water rights permits, laws, and guidance documents that govern that entity, and to describe how those documents, laws,

and permits differ from the terminology and procedures that are applied in other aspects of the Regional Water Plan (RWP). For example, if a river authority holds surface water rights for most of the water in a river basin, and if the operation and management of the water supply reservoirs in the basin is governed by a permit (such as a water management plan) issued by the Texas Commission on Environmental Quality (TCEQ), the intricacies of that permit should be discussed in the RWP to assure that every aspect of the permit has been considered before that Region makes assumptions regarding water availability in the Region – the terms of the permit must be applied in full, so that the Region can make meaningful assessments of predicted water availability when its water availability models are run. If the water availability models performed by a river authority and a Region's consultant are different, this should be clearly explained and justified in the RWPG. If a RWPG uses definitions that vary from those in the applicable TWDB rules, this should be highlighted in the RWP. If a RWPG relies upon definitions that are unique to a water right permit holder in the Region, this should be highlighted and explained in the RWP. As a general rule, RWPGs should be required to describe and explain the basis for, and the consequences of, their decisions to deviate from the concepts and definitions that are used in TWDB rules as compared to the concepts and definitions used in a TCEQ-issued water right permit when such a permit has a substantial impact on water availability and supply calculations for the Region.

More specifically, a RWPG's reliance upon the Firm Yield of water supply reservoirs in the Region should be closely scrutinized by the RWPGs and the TWDB. The CTWC has major concerns with the continued reliance on Firm Yield by many of the regions, such as Region K. The methodology of the Firm Yield calculation is very troubling because it allows storage within reservoirs to be drawn down to ZERO without providing any water reserves to cover the situation when future droughts are more severe than droughts observed during the period of record. In a river basin such as the one in the Region K Plan, the river authority operates large water storage reservoirs under the terms of a TCEQ-approved water management plan, which establishes water management actions that may not be incorporated into the Region K Plan (such as the large volumes of water released from reservoir storage for environmental flows or for specific downstream customers). As we understand it, the surface water availability numbers used by Region K in its Region K Plan do not incorporate the expanded provisions of the river authority's water management plan, and therefore, the water availability numbers presented by Region K are substantially larger than the water that is actually present and available for use in the Highland Lakes.

CTWC research indicates that under the terms of the river authority's current TCEQ-issued water management plan, the required interruptible customer releases and environmental flow releases reduce the water available to firm water customers in Region K by up to 100,000 acre-feet per year. The Lower Colorado River Authority (LCRA) reported that it released 115,586 acre-feet, or about 31% of water released from the Highland Lakes, for environmental flows in 2020, which appears to be far above the projected releases in LCRA's 2020 Water Management Plan. Also in 2020, the river authority reported that downstream interruptible agricultural customers used 84,472 acre-feet, or about 23% of all water used from the Highland Lakes. CTWC is concerned that Region K may be greatly overstating the water available in these storage reservoirs because Region K is assuming that all applicable permit conditions (including all intricacies of LCRA's Water Management Plan) are met, as they should be under TWDB's "Firm Yield" definition in 31 Texas Administrative Code (TAC) Section 357.10(14). However, our research indicates that LCRA's releases of stored and storable water for environmental flows and for interruptible customers are not accounted for in the Firm Yield calculations for the storage reservoirs within Region K. This raises questions about the regulatory and real-world consequences of overlooking these releases from reservoir storage in the RWP for Region K and suggests that the Firm Yield volumes for the upstream reservoirs in Region K are higher than they should be.

In addition to our concern that the Firm Yields used in Region K's water planning are higher than they should be (as explained above), CTWC also has concerns about the volumes of water used from reservoirs as compared to a reservoir's Firm Yield. In our view, aggregate water uses from a reservoir should never exceed a reservoir's Firm Yield in any 1 year, otherwise how can the reservoir sustain itself through a drought of record? The Firm Yield calculations should include ALL releases for any use, and a serious discussion and evaluation should be required to justify the risks of not adhering to the State's definition of Firm Yield.

- RWPGs should be required to identify and discuss significant changes in inflows to water supply reservoirs. As an example, the Lower Colorado River Authority in Region K has data evidencing dramatic declines in the inflows to the Highland Lakes. These observations should be highlighted and addressed in a Regional Plan, as they are alarms for water planners who rely on historical data without constantly updating and evaluating new information. As acknowledged on Page D-67, Chapter 5 of the Draft 2022 State Water Plan, changes over time to reservoir inflows are "not presently accounted for in the methodology" for assessing surface water availability. CTWC asks the TWDB to acknowledge these issues and develop tools and adjustments to incorporate and account

for the observed declining inflow trends into water availability modeling, at least in the Lower Colorado River Basin within Region K. CTWC also believes that there would be value in establishing a "Rate of decline trigger" evaluation and review process. If the water supplies from the reservoirs drop more than expected, then that event should trigger an immediate review of why it occurred and how to address it. Water sustainability is too critical to wait until a crisis and have no time to react.

- RWPGs should be required to describe and discuss the impacts of reservoir elevations in water supply reservoirs. For example, reservoirs that have low water levels may present serious impediments to fire fighting activities in wooded areas that rely on access to the reservoir to draft water during wildfire emergencies. In addition, low water elevations may hinder a water provider's ability to obtain water when its intake pipe can no longer reach the water body.
- RWPGs should be required to specifically address water pricing as a conservation strategy for all water user groups. As the TWDB and the RWPGs have all agreed, conservation is an essential strategy for sustaining water supplies throughout Texas and all of its water user groups. In Region K, CTWC supports the conservation strategies presented for agricultural irrigation but is concerned that those strategies may not be implemented without incentives such as higher water rates and outside funding for conservation projects. Water rates can incentivize water conservation, and revenues from appropriately priced water can fund meaningful conservation projects. Instead of not addressing the issue of water pricing, CTWC requests that RWPGs be required to discuss and describe the impact of water pricing for all water user groups within each Region, including the impact on conservation and implementation of water efficiency and supply projects.
- After describing the benefits of conservation and the various conservation-based strategies in a Regional Plan, the RWPGs should also collect and present data that allows an accounting of the results of the conservation strategies implemented by the water user groups. Collecting data and verifying the savings associated with a conservation method or practice would assist the Regions in making better decisions in future plans. With additional data on water savings, water user groups can identify their successes or deficiencies with respect to different conservation practices.
- CTWC applauds the fact that RWPGs are now required to set specific per capita per day water use goals for each municipal water user group for each decade of the RWPs. This information, presented in Chapter 8 of the 2022 State Water Plan, will be useful for measuring conservation progress and successes. CTWC respectfully requests the inclusion of comparable goals for agricultural water users in these plans. Establishing

water conservation metrics and goals for agricultural water users is a logical and reasonable next step toward achieving water savings through conservation, especially in view of the fact that agricultural water users continue to demand the largest quantities of water in the state.

- To assist the RWPGs in achieving their goals as an organization, CTWC encourages the TWDB to provide more specific rules on the composition and lengths of terms of service for RWPG members. In some regions, the same leadership has existed for 15 or more years, and the RWPG members are reluctant to make changes out of respect for longtime members. In some regions, the persons serving on a RWPG have changed jobs or retired or moved out of the regional water planning area. In such cases, it is difficult for them to continue representing their designated interest group in a meaningful way. It seems appropriate to provide some limits on the number of years that a member may serve, and to set minimum expectations regarding a member's representation of an interest group. Again, this is a sensitive area among the members of a RWPG, but it could be addressed with TWDB rules relating to RWPG members and leaders that answer these tough questions for the groups without causing emotional distress.

2. Does there need to be more guidance developed by the TWDB to support planning groups in addressing the risks of droughts worse than the drought of record?

- Yes, RWPGs would benefit from additional TWDB guidance on addressing the risks of droughts worse than the drought of record. Recent data and experience indicate that water planning based on historical drought records will not provide adequate safeguards for the future, and RWPGs should consider and plan for extended, epic droughts. Require planning groups to calculate Firm Yield using methods prescribed by the Texas Administrative Code to see differences and risks associated by current methods that deviate from current TWDB and TCEQ rules and definitions. Require explanations as to why is it prudent to allow more risky approaches.
- For water supply reservoirs in each Region, the RWPGs should be required to utilize a "Safe Yield" for those reservoirs, rather than the traditionally acceptable "Firm Yield." This adds a safety margin that is essential in view of current science and recent reports by the Texas State Climatologist.

3. *Should planning groups all follow a single, consistent approach to address the potential for a drought worse than a drought of record in their plan development? Or should each planning group be allowed flexibility in its approach?*

- All planning groups should be required to meet the same minimum standards for addressing the potential for a drought worse than the drought of record, with the option of flexibility to utilize more conservative approaches.

4. *What methodological clarification or new method might be needed to best support planning groups in planning for potential droughts worse than the drought of record?*

- To assist the RWPBs in drought issues, it would be appropriate to provide tools and methods that expedite the development of naturalized flows and that allow the most current data available to be used as input into water availability models. For example, it would be helpful to provide adjusted historical inflows that accurately account for issues not currently addressed in the current naturalized flow calculations, such as changes to the watershed from currently untracked factors such as the presence of permit-exempt stock ponds and the proliferation of alluvial wells along rivers. In the upper basin of Region K, there has been a very large and statistically significant trend toward lower inflows into the water supply reservoirs, and reliance on the historical inflows will provide an inflated estimate of water availability.

5. *Should the framework for state water planning consider adjustments to the current 50-year planning horizon?*

- While a 75–100-year horizon may provide valuable insights, which could be important given the long-lead times often required for water supply projects, it may be more beneficial to improve the quality of the 40-50 year timeframe evaluation.

6. *Should the framework for state water planning consider ways for the state to play a more direct role in shaping the plans including evaluating and recommending projects (i.e., include consideration of state-identified or state-initiated large-scale water supply projects?)*

- Yes, CTWC believes it would be appropriate for the state to become more involved in shaping RWPs, and the state's involvement would facilitate the discussion and evaluation of critical inter-basin water supply projects.

TWDB Planning Rule Revisions under Consideration. CTWC supports all of the new guidance principles, process improvements, and clarifications presented by the TWDB in its May 20, 2021, letter to stakeholders.

Thank you for the opportunity to provide these comments on this important topic. Please let me know if there are any questions or if I can be of any assistance as the agency reviews and considers CTWC's input.

Sincerely,



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