

January 7th, 2021

Mr. Ashley Harden
Office of General Counsel
Texas Water Development Board
P.O. Box 13231
Austin, TX. 78711-3231

RE: Proposed Amendments to 31 TAC 357 and 31 TAC 358.

Dear Mr. Harden:

Thank you for the opportunity to provide comment on the Texas Water Development Board's (TWDB) proposed amendments to 31 Texas Administrative Code (TAC) chapters 357 and 358 relating to regional water planning and state water planning respectively. These proposed amendments were published in the December 31, 2021 volume of the *Texas Register*. Broadly, Texas 2036 believes that state water policy needs to offer greater opportunity for the development of water markets. Further, Texas' water policy needs to incorporate certain climate data, especially those relating to extreme weather trends and forecasts, to calibrate state and regional planning processes appropriately. Texas 2036 offers these comments to encourage TWDB's consideration of these and other changes to the proposed amendments to 31 TAC chapters 357 and 358.

Expand 31 TAC 357 and 358 to include broader contemplation of water markets.

Water markets have been widely discussed, but intermittently implemented across Texas. Currently, water markets are working in a few regions, including the Edwards Aquifer and other groundwater areas. Water markets offer an opportunity to assign a value to water, contributing to more efficient use, including other beneficial uses, and lower long-term consumption. Texas' water policy, as reflected within 31 TAC chapters 357 and 358, needs to be changed to encourage market development. While the aforementioned chapters include limited, sometimes oblique, references to water markets, both should be amended to explicitly contemplate their use, especially within the context of state and regional water planning. Amending these chapters to include clear, specific references to water markets would send an instructive signal to water practitioners that water markets could function as an effective water supply strategy. Towards that end, the following four amendments are recommended for 31 TAC chapters 357 and 358.

Amend §357.10 relating to Definitions and Acronyms to include a definition of "water market." Adding a definition of the term "water market" is a logical predicate to amending subsequent sections of TAC to include references to this water supply strategy. The section should be amended to include a new subsection to read as follows:

(). Water Market. Any formal or informal exchange, excluding wholesale and retail water transactions, where water rights, and all or a portion of the volumes associated with those

rights, are sold and purchased or leased for the purposes of conveyance or transfer, supply, or changing the legal purpose of use.

Expand §357.22 relating to general considerations for development of regional water plans to include the consideration of established water markets. Subsection (a) lists 15 inputs that regional water planning groups (RWPGs) shall consider when developing regional water plans (RWPs). This subsection should be amended to instruct that RWPGs consider information relating to water markets' operations and impacts within their respective areas. Adding the following suggested subitem to subsection (a) would accomplish this objective:

(). Information on the effects of water markets functioning within the planning region.

Amend §357.34 relating to the identification and evaluation of potentially feasible water management strategies and water management strategy projects to include explicit references to water markets. Water markets can work as a discrete water management strategy. As written, §357.34 does not clearly contemplate the use of water markets as a potentially feasible water supply strategy. Two amendments to §357.34 would provide the needed necessary clarity. First, amend §357.34(c)(1) to distinguish water markets from water marketing:

(1) Expanded use of existing supplies including system optimization and conjunctive use of water resources, reallocation of reservoir storage to new uses, voluntary redistribution of water resources including contracts, water markets[ing], regional water banks, sales, leases, options, subordination agreements, and financing agreements, subordination of existing water rights through voluntary agreements, enhancements of yields of existing sources, and improvement of water quality including control of naturally occurring chlorides.

Second, amend §357.34(e) to require that RWPGs' evaluations of potentially feasible water management strategies include an analysis of the effects of water markets withingwithin the region. Here, a new subitem should be added to subsection (e) to read as follows:

(). A description of functioning water markets within the region, and their effects on water supply consumption and conversation, assignation of water value, and reallocation of water resources towards other beneficial uses, including domestic and industrial consumption, and instream and environmental flows.

Amend §358.3 relating to guidance principles for the state water plan to include the consideration of water markets. Here, §358.3(10) should be amended to read as follows:

(10) Consideration of opportunities that encourage and result in voluntary transfers of water resources, including but not limited to water markets, regional water banks, sales, leases, options, subordination agreements, and financing agreements.

Maintain requirement that RWPGs evaluate economic impacts of failing to maintain water supplies. The proposed rule strikes the requirement within 31 TAC §357.33(c) that RWPGs evaluate the social and economic impacts of not meeting water needs. The explanation for this change provided in the preamble states that this provision is removed because it is duplicative of §357.40(a). Broadly, this change makes sense as §357.33(c) appears as incongruous with the other requirements of §357.33, while §357.40 instructs the provision of certain impact descriptions. Section §357.40(a) requires a socioeconomic analysis, however, which is arguably different than the social and economic analysis required by §357.33(c). A socioeconomic analysis broadly considers the social and economic implications of failing to meet water needs. An economic analysis centers on more granular data instructive for policymaking purposes. For example, job losses, GDP declines, and lost tax revenues are examples of specific economic data. Towards that end, §357.40(a) should be amended to read as follows:

RWPGs shall include a quantitative description of the socioeconomic and economic impacts of not meeting the identified Water Needs [~~pursuant to §357.33(c) of this title (relating to Needs Analysis: Comparison of Water Supplies and Demands)~~].

Amend the definition of “Firm Yield” to include evaporative losses. In September 2021, Texas 2036 and the Office of the State Climatologist at Texas A&M University released the report, *Assessment of Historic and Future Trends of Extreme Weather in Texas, 1900-2036*. The report observes that by year 2036 the average state temperature will average 3.0 degrees Fahrenheit warmer than the 1950-1999 average. In addition, the average number of 100-degree days are expected to double between now and 2036. The report concludes that the continuation of this warming trend “would lead to a roughly 4% increase in the expected summertime evaporative losses from reservoirs in 2039 compared to 2000-2018.” Given these findings, the definition of “Firm Yield” in 31 TAC §357.10(14) should be amended to include evaporative losses:

(14) Firm Yield--Maximum water volume a reservoir can provide each year under a repeat of the Drought of Record using anticipated sedimentation rates, anticipated evaporation losses, and assuming that all senior water rights will be totally utilized and all applicable permit conditions met.

Both sedimentation and evaporation affect a reservoir’s firm yield. This change updates the definition to reflect these influences. Moreover, this change ensures that Firm Yield data used to inform regional water supply analysis includes evaporative losses. The fact that the proposed rule change to §357.32(c)(1) includes the reference to the definition of Firm Yield in §357.10 makes this change all the more necessary.

Require that regional water planning groups consider extreme weather data and trends provided by the Office of the Texas State Climatologist. Texas 2036 has published two reports in partnership with the Office of the Texas State Climatologist assessing historic and future extreme weather trends in Texas. These reports indicate that Texas will endure more rainfall variability, greater drought intensity, and increased temperatures that will materially affect surface water availability. These data should be

considered by regional water planning groups when developing regional water plans. Towards that end, §357.22, relating to general considerations for the development of regional water plans, should be amended to encourage the consideration of these data. Section 357.22(a) should be amended to include the following subitem:

() extreme weather data and trends made available by the Office of the State Climatologists at Texas A&M University.

Lengthen proposed time for publication of regional water plan amendments. As drafted, the proposed amendments to 31 TAC §357.51(b)(2) shorten the length of time that TWDB shall make major regional water plan (RWP) amendments available to the public from 30 to seven days “as required by Section 357.21(g)(3).” Section 357.21(g)(3) requires, however, that notice of major RWP amendments must be provided, and written comments received, 30 days prior to the hearing. Looking at the two sections together, it’s hard to reconcile why an individual could be allowed to submit written comments on a proposed amendment 30 days before a hearing when the text of that amendment is not made available until seven days before that hearing. Rather than shorten the length of time for the publication of RWP amendments from 30 to seven days, the 30-day window in §357.51(b)(2) should be kept intact in order to ensure that the amendment publication window corresponds with the public comment window for proposed amendments.

Authorizing RWPGs to plan for drought conditions worse than the drought of record is excellent policy. As proposed, the amendments to 31 TAC §358.3 authorize RWPGs to use a drought other than the drought of record for planning purposes. Texas’ paleoclimatic record indicates that the state has endured droughts worse than the Drought of Record of the 1950’s. This proposed change to §358.3 allows RWPGs to consider drought conditions worse than the standard, Drought of Record metric for water supply planning purposes. This laudable change is needed.

Thank you for your time and consideration of these comments. Please feel free to contact me directly should you have any questions, concerns, or wish to discuss further.

Sincerely,

Jeremy B. Mazur
Senior Policy Advisor