

LCRA Comments for 2007 Draft State Water Plan (Draft Plan):

1. General comments:
 - 1.1. The table headings associated with the “Existing Water Supplies” Sections of the Regional Summaries (Volume II, Chapter 2) is confusing. Since this section of Chapter 2 of the Plan presents currently available supplies to the WUGs from both a physical and legal perspective, we recommend the heading be entitled “Water supply sources for 2010 and 2060 under existing conditions,” instead of “Existing Water supply sources for 2010 and 2060.” It is our understanding that a water supply could exist, but not be legally or physically accessible by a WUG, in which case it would not be included on this table.
 - 1.2. LCRA is concerned that the definition of “Reuse” in the 2007 Draft Plan (Volume II, Chapter 8), which includes both direct and indirect reuse, may not be entirely consistent with how that term was used when quantifying the available supply from reuse, specifically in relation to the amounts of “reuse” reported for the Region K Plan (see further comments below regarding reuse)..
 - 1.3. We believe it would be helpful if the Draft Plan included a comprehensive description (both narrative and graphic) of the export/import of water between different Basins and different Regions, identifying both existing and future planned strategies.
2. Volume I, p. 4: Under the section titled "How much water do we have now," reference is made to primary sources of water, including surface, ground, reuse water. It is recommended that the reference to reuse water be deleted since it is a secondary use of a primary source of water, or to add “*and secondary*” after the word primary.
3. Volume I, p. 12: Figure 7 (and Volume II, p. 266, Figure 10.5), which shows locations of recommended major and minor reservoirs does not identify the general locations of the Region K Plan’s proposed off-channel reservoirs. We recommend these be included.
4. Volume II, Chapter 2, Region F summary, p. 48: Under “Select Major Water Strategies,” one of the strategies listed is “fifty-one strategies for subordination of downstream senior water rights....” This description appears to be at odds with the strategy included in Region K, which only included a small number of water right holders (Austin, LCRA, and Corpus Christi). Moreover, these water right holders agreed to an assumption for planning purposes that they would not call on inflows from Region F during the planning period. This should be clarified in the 2007 State Plan..
5. Volume II, Chapter 2, Region G summary:
 - 5.1. p. 50: Under "needs," why the total water is not accessible to all water users need to be explained: is it because of physical, legal or other limitations?
 - 5.2. p. 52 and p. 54: Table G.2 on p. 52 identified existing source of water transfer to Region G from Region K as “Colorado River combined run-of-river-LCRA supply reallocation”, and on p. 54 under “Select Major Water Strategies”, the source for one of the future strategies listed is “Conveyance of 49,000 ac-ft of

surface water from Lake Travis to Cedar Park, Leander, Round Rock, and Chisholm Trail Utility District". For the purpose of consistency between Regions G and K Plans, LCRA recommends that the source for existing transfers be Lake Travis given current permit authorizations, and the source for the future strategy be Colorado River combined run-of-river-LCRA supply reallocation. Additionally, LCRA believes there may be an inadvertent discrepancy between the amount of supply listed for future strategies under "Select Major Water Strategies" (p. 54) of 49,000 ac-ft and the amounts included in the Region K Plan. LCRA believes perhaps its existing contract with the Brazos River Authority (BRA) for 25,000 ac-ft/yr may have been grouped in the future strategies when instead it should have been included in the "Existing Water Supplies", Table G.2.

6. Volume II, Chapter 2, Region K summary:
 - 6.1. p. 74: Under the description of "Existing Water Supplies," use of the term "voluntary subordination" is different from the term "No-call assumption" used in the Region K Plan. The language used in the Region K plan was very carefully negotiated among the affected parties, and we would recommend tracking that language to avoid any undue confusion or concern. Additionally, the Region K Plan includes a fairly detailed discussion associated with this subject, which LCRA believes warrants a specific reference in the State Plan.
 - 6.2. p. 76: The list of existing water supply sources in Table K.2 showing the Highland Lakes-related supply dropping from 380,104 af/y in 2010 to 72,477 af/y in 2060 is very confusing and does not track the numbers in the approved Region K Plan. The total supply of the Highland Lakes is not going down to 72,477 in 2060. Rather, this table appears to reflect the decrease in legally available supply to the WUGs because many existing contracts will expire prior to 2060. Changing the Table title to avoid this confusion would be helpful (see Comment 1.1 above).
 - 6.3. p. 76 "Recommended Water Management Strategies and Cost": LCRA suggests the following specific paragraphs be reworded as follows:
 - 6.3.1. "The primary recommended water management strategy is the Lower Colorado River Authority/San Antonio Water System Project that consists of off-channel reservoirs, agricultural water conservation; additional groundwater development, *and new and/or amended surface water rights.*"
 - 6.3.2. "The majority of *new* surface water *captured in the off-channel reservoirs* will be used by...."
 - 6.4. p. 76 "Ongoing Issues": Suggest the following change: Because feasibility studies for this project are at about the midpoint of the scheduled seven-year time period, the project can't go forward until all studies are completed, the project is found to be feasible, *and all statutory and permitting requirements can be satisfied.*
 - 6.5. p. 76: "Select Policy Recommendations: Under the 3rd bullet, suggest delete "and wastewater reuse" and add an additional bullet: "Promote wastewater reuse where it does not adversely impact other water users or environmental flow needs."

- 6.6. p. 78: Under "Select Major Water Strategies," the representation that the "Wastewater reuse by Austin," produces 144,090 ac-ft/yr. is misleading. Region K Plan has included some direct reuse and potential indirect reuse by Austin; however, the total of those strategies (Table 4.26 of Region K Plan, p. 4-21) does not come anywhere close to the amount listed in the Draft State Plan. If the total amount is comprised of elements other than what is listed as reuse in the Region K Plan, perhaps the terminology could be modified to reflect such variation. Although Austin's application to the TCEQ for indirect reuse has not been granted yet, the Region K Plan included some estimates of indirect reuse with various notes associated with such estimates, including ongoing litigation, which likewise should be referenced in the Draft State Plan.

If the total reported reuse is comprised of the contributions that are not related to City of Austin's wastewater effluent discharge, as reported in Table 4.27 of Region K Plan on p. 4-22, then the total amount from reuse shown as 144,090 ac-ft/yr may need to be changed. This same amount of reuse is shown also on Figure K.5, p. 75 and in Table 10.5, Chapter 10, p. 271, which may also need to be reevaluated, and as such, the text on p. 78 may need to be revised to add other potential contributors.

As with the planning assumptions regarding calls on inflows from Region F, the language regarding reuse was carefully negotiated among participants in the Region K planning process and LCRA would urge the State Plan to avoid any departure from the agreed upon language.

7. Volume II, Chapter 6, Surface Water Resources:

- 7.1. Section 6.1, p. 144: The summary for Colorado River Basin listed the yield of Highland Lakes system as 501,407 ac-ft/yr, which is not consistent with Region K Plan's p. 3-61, Table 3-25 showing yield of 382,924 ac-ft/yr in year 2000. Appendix 6.1 also shows the yield of Lake Travis as 501,407 ac-ft/yr. Should these figures be consistent with Region K Plan's supply estimates, as noted above?
- 7.2. Section 6.1, p. 144: The same page also shows a pie-chart showing hydropower rights of more than 2 million ac-ft/yr, and municipal and domestic rights of 2.2 million ac-ft/yr. We recommend that these not be shown separately since the hydropower rights are a non-consumptive subset of the municipal/domestic water rights that is shown on the pie-chart.
- 7.3. Section 6.7, p. 169: On last full sentence on the page, add "return flows" after "reservoirs,".
- 7.4. Section 6.8, p. 171: In first sentence, add "return flows" after "contract,"

8. Volume II, Chapter 8, Water Reuse:

- 8.1. Section 8.1, p. 240: At the end of the second full paragraph, add: "On the other hand, reuse may also take water away from downstream water users and environmental flow needs or negatively impact the calculations of reservoir yields that have relied on the availability of return flows."

- 8.2. Section 8.2, p. 243 (and the text on p. 242): Table 8.1 listing “Existing supply of water from reuse” did not include any information from Region K Plan (p. 4-39), which does include some existing direct reuse
9. Volume II, Chapter 9, Water Reuse, p. 249: Table 9.3 listing “Volume of needs by planning area,” may need to be adjusted due to the above comments.
10. Volume II, Chapter 10, Water Management Strategies:
- 10.1.p. 261: Table 10.1 shows “New supplies available from all recommended strategies” for Region K as 861,930 ac-ft/yr in 2060, whereas Table 4.111 of Region K Plan, p. 4-133 shows such value as 641,366 ac-ft/yr (other tables in chapter 10 use the same 861,930 as available in 2060). It is unclear how this number was derived and whether this 861,930 ac-ft/yr includes the future transfers to Regions G and L that are discussed elsewhere.
- 10.2.pp. 263-264: Table 10.2 shows for Region K “new supplies from irrigation conservation” as 143,000 ac-ft/yr, whereas p. 4-107 of Region K Plan showed conservation strategies could achieve up to 180,000 ac-ft/yr, including reduced water demand from adoption of “new rice varieties”. Page 262 describes various means of irrigation conservation that did not specifically include “new rice varieties” requiring lesser amount of water. LCRA would suggest that Table 10.2 also identify the potential savings from “new rice varieties”, as was included in Region K Plan.
- 10.3. p. 271, Table 10.5: Table 10.5 shows for Region K “new supplies from water reuse” as 144,090 ac-ft/yr. Please see comment #5.5 above related to this issue.
- 10.4. Section 10.2.6, p. 272: third sentence, add Region K as a plan that includes the conjunctive use of surface and ground water.