

RESPONSE TO TWDB COMMENTS

Level 1:

1. The values in Table 2-4 for Edwards County have been corrected to be consistent with the TWDB-adopted projections. The municipal water demand is projected to be 233 ac-ft/yr. in 2030, decreasing to 82 ac-ft/yr. by 2080. In addition, the text on page 2-14 has been corrected to be consistent with Table 2-4.
2. Chapter 3 Appendix 3B includes a copy of the Hydrologic Variance Request and the TWDB Approval Letter for the Plateau Water Planning Area.
3. Chapter 3 Section 3.4 (paragraph 2) details how the reuse supply volumes were determined for all WUGs listed within Table 3-1.
4. The discussion within Section 5.3.4 “Regional Conservation Water Management Strategies” regarding vegetative management as being a strategy classified as “conservation” has been removed. In addition, Tables 5-10 and 5-11 (originally Tables 5-6 and 5-7) no longer include vegetative management as a “conservation” strategy. A new table has been developed regarding the vegetative management strategies, which can now be found within Section 5.2.8. Lastly, the vegetative management line items found within Table 5-7 (originally Table 5-2) that had the label “Demand Reduction,” have now been modified to “Availability Increase” to better align with DB27.
5. All relevant tables have been updated to present J-3 Promote, design & install rainwater harvesting systems on public buildings for the City of Bandera as an “Availability Increase” water management strategy. This identifier aligns with DB27 for planning purposes.
6. Appendix 5A 5.4 (J-61 Manufacturing Conservation) for Real County Manufacturing, the strategy description has been updated by removing rainwater harvesting as a Best Management Practice (BMP). The first paragraph that lists several conservation recommendations includes: (1) conduct a water audit, (2) install water-saving equipment, (3) reuse water, (4) adopt water management technologies, and (5) set targets and incentives. There are no costs associated with this recommended water management strategy.
7. Table 5B-1. Quantity, Quality and Reliability Category Ranking Matrix has been a carry-over table for a handful of planning cycles now. This table has been updated to: (1) better align with other regions, and (2) not cause any more confusion about strategies being sustainable during a repeat of the drought of record. All strategies within the original Table 5-2 (now Table 5-7) are reliable, having a firm supply during a drought of record, with a ranking of high, moderate or low. Table 5-7 (originally Table 5-2) has been updated to align with the updates made to Table 5B-1. Water management strategies J-3, J-6, J-32 and J-56 will continue to have a ranking of 2 – Moderate. Water management strategies J-14, J-23, and J-54 have been modified to a ranking of 1 – High. These are groundwater strategies.
8. Appendix 5A and Table 5-7 (originally Table 5-2) have been updated to provide a quantitative reporting of reliability for all evaluated water management strategies.
9. Livestock Conservation strategies: J-18, J-26 (original for IPP), J-42 and J-44 have been removed from the Plan. New text has been added to Chapter 5 Section 5.3.6 (first paragraph) explaining why

livestock conservation is not considered in the regional water plan. Chapter 4, Chapter 5, and Appendix 5A have been updated to align with the removal of these four water management strategies. DB27 has been updated to remove strategies: J-18, J-42 and J-44. DB27 has been updated to change J-26 from a conservation strategy to a groundwater well strategy.

10. Chapter 5, Appendix 5A, Strategy J-64 has been updated to reflect revisions submitted by Del Rio Utilities. These revisions include information from the TWDB funding application and white papers on the project. All information has been reconciled within the Plan (Chapters 3, 4, 5 and Appendix 5A and 5C). DB27 has been updated.
11. DB27 has been updated to reflect Strategy J-34: Project 2a as “New Reservoir.” The new subsection in Chapter 5 related to “implementation status for certain large projects” includes the required TWDB table and some information related to the delay in the implementation status. No Gantt Chart was developed for this strategy that has yet to begin.
12. Appendix 5A regarding water management strategies: J-6, J-32 and J-34: Project 3 related to ASR have clarifying text that have been added to each strategy description, denoting that the strategy water supply volumes represented are reflective of the expected 70 percent recoverable rate. Table 5-7 (originally 5-2) and DB27 have been updated to align with the revised water supply volumes and total capital costs have been updated were appropriate.
13. Chapter 5 Tables 5-2, 5-3 and 5-4 (now Tables 5-7, 5-8 and 5-9) and Appendix 5A have been updated to include a new conservation water management strategy for Kerrville South Water - Public Conservation Education. This recommended strategy was pending response from the WUG for the inclusion of the IPP. Based on some additional follow-up phone calls, the WUG has responded, stating that this strategy needs to be included in the final, adopted regional water plan. DB27 has been updated.
14. Appendix 5A (J-37) has a recommended conservation savings of one acre-foot per year. Due to the skewed WUG split data, the demand projected for the WUG split ranges between one to two acre-feet per year, which results in 100-50% of the demand. This volume “appears” impractically high, but in reality is not impractically high. Discussion has been added to support these findings to the strategy description within Appendix 5A (J-37).
15. Within Chapter 5 Section 5.3.9 (originally 5.3.8) a new paragraph has been added clearly stating the PWPG’s adopted GPCD goals for planning purposes.
16. Appendix 5A, Section J-34. The evaluation for the Eastern Kerr County Regional Water Supply Project – Construction of Off-Channel Surface Water Storage – has updated language to include the estimated mitigation land acreage and associated estimate of acquisition cost.
17. Chapter 5 and DB27. Additional content has been added to Chapter 5 Section 5.2.8 related to the costing methodology followed in estimating cost of water yield for brush management / vegetative management control programs by type and/or density, for strategies: J-13, J-24, J-39, J-51, J-52, J-60 and J-68. Tables 5-7, 5-8 (originally Tables 5-2 and 5-3) and DB27 have been updated accordingly. Costing methodologies have been added to each of these water management strategy descriptions in Chapter 5 Appendix 5A. Strategies J-27, J-46, J-61 and J-69 which were conservation strategies associated with the manufacturing and mining water user group, which had

zero unit costs, have been removed from Tables 5-7, 5-8, and 5-9 (originally Tables 5-2, 5-3, 5-4), Appendix 5A and DB27.

18. Chapter 5, Appendix 5A Strategy J-29. Project description has been revised to include a 5 MGD advanced WTP to accompany detention storage. Total capital cost has been modified to reflect the change. Updates have been made to Tables 5-7 and 5-8 (originally Tables 5-2, and 5-3) and DB27 to reflect the modifications made.
19. Chapter 5 Tables 5-7, 5-8, and 5-9 (originally Tables 5-2, 5-3, and 5-4), Appendix 5A and DB27 have been updated with the removal of Strategy J-50 – Increase Storage Facility for Fort Clark Springs MUD. According to additional survey efforts and several phone calls, the MUD has not taken any affirmative steps and is no longer pursuing this water management strategy.
20. Appendix 5A, J-57. Clarifying language has been added to justify that this water management strategy does increase water supplies by interconnecting the wells, which will require additional storage.
21. The capital costs for each of the “Public Conservation Education” water management strategies (J-7, J-20, J-53, and J-55) have been removed from Chapter 5 Tables 5-7 and 5-8 (originally Tables 5-2 and 5-3) and Appendix 5A. A new “Public Conservation Education” strategy has been developed for Kerrville South Water (J-71). Appendix 5C includes a description of the costing methodology and provides costing details for each strategy. DB27 has been updated by removing the capital costs for the existing strategies found within the IPP and by adding the necessary information to the database related to the new strategy for the final plan.
22. Chapter 5 Appendix 5A, details a “Water Treatment Plant Expansion” strategy for the City of Del Rio (J-64). Clarifying language has been added to this strategy description to ensure that it’s understood that the expansion is focused on increasing the treated water supply volume, not to replace lost capacity. The water management strategy description has also been updated to reflect project details outlined on the submitted TWDB funding application and white papers developed by the water utility (please see Comment #11).
23. Chapter 5, Section 5.3.6 includes new content describing the methodology for calculating potential supply yield for rainwater harvesting, including a general formula. In addition, Appendix 5A Strategy J-3 Promote, Design, and Install Rainwater Harvesting Systems on Public Buildings for the City of Bandera, includes a description of the methodology used for calculating the strategy supply volume during drought-of-record conditions.
24. Project maps have been included in Appendix 5C of Chapter 5 of the final, adopted regional water plan.
25. Chapter 5, Table 5-7, 5-8 and 5-9 (originally Tables 5-2, 5-3 and 5-4), Appendix 5A and DB27 have all been updated to remove the alternative water management strategy J-14 – Additional Groundwater Wells to Provide Emergency Supply to Volunteer Fire Department.
26. The discrepancy between the regional water plan strategy supply volumes and that of DB27 have been reconciled. The updated strategy supply volumes do include the anticipated 70 percent recovery rate. A new sentence has been added to the strategy description in Appendix 5A (J-6) to help clarify.

27. A sentence has been added to Chapter 6 (paragraph 2, sentence 2) to reference the identified WUG unmet needs within the Region presented in Chapter 5, Section 5.2.6. In addition, Table 6-1 presents a list of all unmet needs by category. DB27 has been updated such that the data within the Plan aligns with the data being reported in the database.
28. DB27 has been updated to align with the Final Regional Water Plan. There are no municipal unmet needs within the Plateau Water Plan. Kerr County-Other will be purchasing water from the Eastern Kerr County Regional Water Supply Project (EKCRWSP) to cover all projected needs throughout the planning period.
29. Chapter 7, Section 7.5, Table 7-3 has been updated to include all the County-Other WUGs listed on the TWDB provided WUG Historical Data excel file. Emergency response typically involves either drilling a new groundwater well and/or truck in water for these small rural entities.
30. In reviewing Chapter 7, Section 7.8.1, the statement below the list of DPC recommendations has been modified to say, “To meet these recommendations, the PWPG has developed this *Plan* with updated precipitation data (Chapter 1 and 7) that reflects the impact of severe drought conditions within the Region. In addition, Chapter 7 provides updated information regarding emergency responses to local drought conditions or loss of municipal supply that were assumed to have 180 days or less of remaining supply (Section 7.5).
31. Chapter 9, Section 9.3.3 and 9.3.4 have been updated to include a sentence that references the reader to the TWDB’s Database Reports application website for the “Source Data Comparison” and “WUG Data Comparison” tables. In addition, a sentence has been added to Section 9.3.4 describing the difference in existing supplies between the 2021 and 2026 plans.
32. The GIS files have been updated to include the metadata.
33. The GIS files have been updated to follow the correct naming convention: “WMS_RegionJ_Point,” as outlined in Exhibit D Section 2.5.2.1.
34. The GIS files’ attribute table has been updated to include all of the required attribute fields listed in Table 1 of Exhibit D Section 2.5.2.1 by adding the field “ShapeDescription,” updating the field type of “WMSProjectID” from text to numerical data, and renaming the field “Strategy” to “ProjectName.”

Level 2:

1. Chapter 2 (page 2-1) last paragraph has some newly added language to help clarify that the 2021 and 2026 Plans were based on utility service areas, whereas earlier regional water plans were based on political boundaries such as city limits.
2. The word “group” has been added to the sentence, “The TWDB did not approve this request due the group quarter population for Laughlin Air Force Base being, 1,574 (Chapter 2, Section 2.1.1 page 2-3).
3. Chapter 2, Table 2-5. For Kerr County, the Headwaters Groundwater Conservation District provided reported usage data (2015-2019). The GCD requires that each entity reports their water usage and felt that this data was more accurate than the voluntary based Annual Water Use Survey data found on the TWDB’s website. Clarification language has been added to the last sentence of Page 2-14.
4. Chapter 3 Section 3.2, a new paragraph has been developed describing the sedimentation rate of the Medina Lake/Reservoir (last paragraph of the section).
5. Chapter 3, Table 3-4 has been updated to include the MAG for Val Verde County (Rio Grande RB): Edwards-Trinity (Plateau), Pecos Valley, Trinity Aquifer.
6. Chapter 3, Section 3.1.9. Within the second paragraph of page 3-20, I have removed the following language, “For the purpose of this *Plan...*” The sentence now reads, “The PWPG considers the MAG value used in previous plans of 24,988 acre-feet per year to be a more accurate representation of the groundwater availability. Although, this is how the planning group feels, the MAG of 50,000 acre-feet per year was used in the development of the 2026 Plan.
7. Chapter 3, Section 3.1.9. The typo of “DCFs” has been corrected to “DFCs”.
8. Chapter 3, Table 3-5 (originally 3-4) has been updated to site the reference found within the 2021 Plan pertaining to the methodology of the Austin Chalk Aquifer | Kinney County | Nueces Basin.
9. Chapter 3, Table 3-1 and Table 3-5 (originally 3-4) are identical to that listed within the 2021 Plan. I’m not sure I understand the comment that implies that the values within the 2026 IPP are lower than 90% of the availability value calculated using the cited 2021 methodology. Nothing has changed from one plan to the next. It was a carry-over methodology and availability value.
10. Chapter 3, Table 3-5 (originally 3-4) Ellenburger / San Saba Aquifer a new sentence has been added to the methodology explaining that the current approach is a placeholder until a MAG becomes available.
11. Chapter 3, Table 3-5 (originally 3-4) has been updated to include the Hickory Aquifer splits in Kerr County.
12. Chapter 3, Section 3.4. Clarifying text has been added to the first paragraph of this Section, explaining that there are currently no existing or future indirect reuse supply projects within the Region.

13. Appendix 5A. For strategies J-6 and J-34: Project 3, the costs were provided by the sponsors in a previous regional water plan and were indexed up to Sept. 2023 dollars. The cost details are different than what is provided in J-6 by using the UCM.
14. Chapter 7, Section 7.3.7 has been updated so that it is understood that the subsection being discussed was added late during the fifth cycle by HB 807 and not new to the sixth cycle of regional water planning.
15. Chapter 9, Table 9-1 has been renamed to “Implementation Survey Results of the 2021 Plan”.
16. Chapter 9, Section 9.4 has been combined with Section 9.2. All regionalization content is now housed together within Section 9.2.
17. Chapter 9, Tables 9-2 and Table 9-3 have been updated to present the decadal volumes for the decades that overlap the two planning cycles only.
18. Chapter 9, Section 9.3.3 and Section 9.3.4 have been updated to include the TWDB’s Database Reports application website hyperlink. Old content that referenced the Executive Summary’s standalone tables has been removed.
19. Executive Summary. The instructions and link to access the DB27 Database Reports and list of relevant reports have been presented together within the Executive Summary. The Executive Summary Appendix has been removed.
20. Chapter 10. The recommendation of providing a list of rural entities not responsive to regional water planning will be considered in the next regional water plan.