

## **RESPONSE TO TWDB COMMENTS**

### **LEVEL 1:**

1a. The following ten strategies listed in the IPP have been changed to a starting decade of 2030 (See response 1b below).

- City of Alpine – Modification of wastewater treatment facility ---
- City of Alpine – Irrigation and recharge application of captured rainwater
- Lower Valley Water District – Surface water treatment plant - - -
- Lower Valley Water District – Groundwater from proposed wellfield
- Lower Valley Water District – Groundwater from proposed wellfield
- Lower Valley Water District – Wastewater treatment facility and ASR
- El Paso County Irrigation (EPCWID#1) – Riverside regulating reservoir
- Hudspeth County Other (Dell City) – Brackish groundwater desal facility
- Hudspeth County Other (Sierra Blanca) – Replace water line from Van Horn
- Fort Davis WSC – Transmission line connecting to Fort Davis Estates

1b. The remaining strategies listed as starting in the 2020 decade could feasibly be implemented by January 5, 2023.

- All conservation strategies can be implemented immediately at the discretion and need of the WUG.
- All water loss audit and main-line repairs can be implemented in a very short time at the discretion of the WUG.
- Groundwater well projects can be implemented within approximately one year at the discretion of the WUG.
- Town of Anthony arsenic treatment and groundwater well are already partially funded and pre-engineering work is expected to commence soon.
- El Paso Water Bustamante WWTP has commenced pre-engineering work.
- Horizon Regional MUD is currently updating their facilities to meet anticipated demand growth.
- All purchase water from EPW involves ongoing contracts with no interruption.
- El Paso County Irrigation – EPCWID#1 new Westway 32 river diversion point is in design and construction expected soon.

1c. The only unmet need resulting from the above strategy starting decades being moved to 2030 occurs with El Paso County Irrigation (EPCWID#1). The irrigation district experiences a shortage (unmet need) because of very little water passing down the Rio Grande during a drought of record. Even if the Riverside Regulating Reservoir strategy were left in place in 2020, the District would still experience a shortage.

1d. The Far West Texas Planning Group acknowledges that they will be expected to rely on its next planning cycle budget for any required Plan amendments.

2. Definition of Major Water Provider in Ch 1 Sec 1.3.4 is revised.

3. Ch 2 Table 2-3 header is revised to Major Water Provider.

4. Ch 2 Table 2-5 is revised to reflect correct demand for Terrell County-Other and for the Region Total.
5. Ch 3 Table 3-2 Culberson Irrigation use from the Capitan Reef Aquifer is revised to show zero availability from 2040 to 2070. Total regional supply also revised for 2040 through 2070 decades.
6. Ch 3 Table 3-3 is revised to show correct direct reuse and Hueco-Mesilla Aquifer supplies for El Paso Water. Also, corrected incorrect Rio Grande Alluvium Aquifer supply for El Paso County WID#1.
7. Heading in Ch 3 Table 3-3 is revised to show Major Water Provider.
8. Methodology for calculating Reuse supply availability is provided in Ch 3 Sec 3.4. Also, Reuse supplies reported for the City of Alpine, Brewster County have been revised in Tables 3-1 and 3-2.
9. TWDB GAM Report (GAM Run 16-030 MAG) for Groundwater Management Area 4 (Feb. 2018) page 32 does not list an availability from the Wild Horse, Michigan, and Lobo segments of the West Texas Bolsons Aquifer in Jeff Davis County. To avoid the confusion, these segments are eliminated from the West Texas Bolsons sub-aquifers in Jeff Davis County in Ch 3 Tables 3-1 and 3-2. The remaining Green River Valley and Ryan Flat segments of the West Texas Bolsons Aquifer are correct.
10. Rio Grande WAM descriptive information provided in second paragraph of Ch 3 Sec 3.1.
11. A Major Water Provider needs analysis by category of use is presented in Ch 4 Table 4-6.
12. A secondary water needs analysis is provided for Major Water Providers in Ch 4 Table 4-5.
13. El Paso County Steam Electric Power secondary needs is added to Ch 4 Table 4-3.
14. Database has been updated to reflect strategies listed in Table 5-2 (5 recommended and 9 alternate). Ch 5 Sec 5.2.6 has also been updated to show nine EPW alternate strategies and one Terrell County mining alternate strategy.
15. Lower Valley Water District Strategy E-25 is eliminated, and line deleted from Tables 5-2, 5-3, and 5-4.
16. Statement of “The project supply is considered interruptible during severe drought conditions” is removed from Strategy J-2. Strategy name is changed to “Irrigation and recharge application of captured rainwater runoff”. Reliability is changed from a 2 to a 1 in Table 5-2. Text is revised to indicate that the project is not primarily intended to reduce flooding, but rather to capture beneficial supply and encourage recharge. Calculations are shown that the three catchment basins with a total area of 70 acres will capture rainfall at a rate of 12 inches a year under drought conditions, which will generate approximately 70 acre-feet of supply per year. Unit cost is shown in Table 5-3.
17. Ch 5 Strategy E-44 is revised to describe that the 5,000 acre-feet per year is “additional water supply as a result of delivery efficiencies.
18. EPCWID#1 has already purchased this property. Strategy E-15 is revised to state this purchase.

19. Strategy E-53 for the City of Sierra Blanca is revised to describe only allowable infrastructure components and DB22 is corrected to show proper source.
20. A general location of the central part of the county is added to Strategy E-65 description.
21. Strategies E-45, 47, 49, 57 and 64 have been eliminated. Capital costs for these privately owned and operated WUGs are beyond the scope of this planning process. Unmet needs resulting from the elimination of these strategies is discussed in Ch 5 Sec 5.2.8.
22. Discussion in Strategies E-1 and E-17 is revised to describe only allowable infrastructure components.
23. Strategy E-8 for the City of Anthony has been revised to not describe non-allowable infrastructure components.
24. Lower Valley Water District Strategy E-25 is eliminated, and line deleted from Tables 5-2, 5-3, and 5-4.
25. A statement describing the selecting recommended strategies is added to Ch 5 Sec 5.2.5.
26. A statement explaining why seawater desalination was not selected as a strategy is added to Ch 5 Sec 5.2.5.
27. A discussion pertaining to direct reuse strategies is added in Ch 5 Section 5.5.5.
28. EPCWID#1 Riverside Regulating Reservoir strategy estimates new supply based on increased delivery efficiency in the canal delivery system after diversion from the river, and therefore, environmental flow consideration is not required for this evaluation. Added language to the strategy text for clarity.
29. A statement explain how third-party social and economic impacts of moving water from rural and agricultural areas is provided in Ch 5 Sec 5.2.5.
30. Management Supply Factors for Major Water Providers is added to Ch 5 Sec 5.2.1.
31. Text revisions are made to list the appropriate decade for strategies E-1, E-2, E-13 and E-14. Also, the starting decade for several other strategies have been changed to 2030 (see response 1a).
32. Response in progress
33. A description of capital cost eligible elements are included in Ch 5 Sec 5.2.1.
34. Unit costs for Strategy E-53 Sierra Blanca are confirmed.
35. The Vinton Hills strategies have been revised to represent both VH Estates and VH Subdivision. Supply and cost have been split appropriately between the entities in DB22 such that no unmet needs will appear.
36. Additional entities with water supply needs (as shown in Table 4-7) are provided in Ch 5 Sec 5.2.8.
37. Ch 5 Sec 5.2.8 is revised to discuss unmet water needs that match DB22.
38. A discussion on unmet water needs is added to the first page and paragraph of Ch 6.

39. A statement explain how third-party social and economic impacts of moving water from rural and agricultural areas is provided in the first page of Ch 6.
40. Impacts to key parameters of water quality are discussed in the last paragraph of Ch 6 Sec 6.1.
41. Chapter 7 Section 7.3 and Table 7-2 are revised to describe existing emergency interconnections.
42. Entities evaluated for emergency response with 180 days or less of remaining supply is stated in the second paragraph of Ch 7 Section 7.4.
43. Model drought contingency plans are included in Appendix 7A.
44. Triggers and responses are included in the Municipal and Wholesale model drought contingency plans, but not for the Irrigation DCP.
45. A discussion on recently implemented drought contingency measures is provided in the fifth paragraph of Ch 7 Sec 7.2.
46. A statement is added to Ch 8 Sec 8.4 that all recommended ecologically unique stream segments have been designated by the Texas Legislature except the Alamito Creek (Texas Pecos Land Trust) and Terlingua Creek (Big Bend National Park), and that these two segments continue to be recommended. A descriptive package for these two recommended segments was provided to TPWD for their analysis and their comment letter will be posted in Chapter 8.
47. Further explanation of the status of the Alamito and Terlingua segments is provided in Ch 8 Sec 8.4. No new segments are being recommended.
48. Compliance with the Texas Public Information Act is added to Ch 10 Sec 10.3.
49. The 2016 strategy implementation survey results are provided in Ch 11 Table 11-1.
50. 2021 Groundwater, Reuse, and Total Source Supply are corrected in Ch 11 Table 11-4.
51. Existing supplies in 2021 Plan for Brewster and El Paso Counties and Total Regional supply is corrected in Ch 11 Table 11-6.
52. Ch 11 Table 11-8 is corrected.
53. Ch 5 Sec 5.2.6 and Ch 11 Sec 11.2.6 are revised with correct total capital cost.
54. A comparison of recommended and alternate water management strategy projects in the 2016 and 2021 Plans are compared in Ch 11 Sec 11.2.7 and in Tables 11-11 and 11-12.
55. A listing of all TWDB data tables are now provided on the ES Appendix cover page.

**LEVEL 2:**

1. The reference to the 2016 Plan was a mistaken carryover from the previous Plan. The sentence is omitted from this Plan.
2. The FWTWPG choses to retain the existing Ch 1 Table 1-2 as is currently displayed, but corrected the table title and the paragraph above to qualify the entries in the table as those with more than a 10 percent loss. No entities reported more than a 10 percent loss in 2017.
3. Ch 2 Table 2-3 - Percentage relabeled as (% of total demand).
4. Ch 5 Page 5-28 – Total percent of water used for irrigation revised to 65 percent.
5. Date revised to 2017 for Balmorhea Aquifer use in Ch 3 Table 3-6.
6. Methodology explanation revised for Edwards-Trinity (Plateau) and Rustler Aquifers in Ch 3 Table 3-6.
7. Reference for Hueco-Mesilla Aquifer availability is added to Ch 3 Table 3-6.
8. Unmet mining needs are listed in Ch 5 Sec 5.2.7.
9. Statement for Study Butte Terlingua Water System is corrected to state that demand is accounted for under Brewster County-Other in Ch 5 Sec 5A-1.2 Strategy E-3.
10. EPW’s reuse program is redefined in Ch 5 Sec 5A-4 Strategy E-10.
11. Strategy E-24 LVWD Public Conservation education capital cost has been revised in the Plan and the Database to \$0.
12. Heading number has been revised from 5.5 to 5.3.
13. The suggested language is added to the last paragraph of Ch 5 Sec 5.3.1.
14. Ch 7 Table 7-3 is updated.
15. The spelling of Evaluation has been corrected in the Table of Contents Sec 5.2.
16. Contents have been updated in the Table of Contents Sec 5.2.
17. GIS – Response in progress
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