

TEXAS WATER DEVELOPMENT BOARD



James E. Herring, Chairman Lewis H. McMahan, Member Edward G. Vaughan, Member

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August 11, 2010

Mr. John Grant Chairman, Region F Regional Water Planning Group c/o Colorado River Municipal Water District Big Spring, Texas 79721-0869

Re: Texas Water Development Board Comments for the Region F Regional Water Planning Group Initially Prepared Plan, Contract No. 0904830865

Dear Mr. Grant: John

Texas Water Development Board (TWDB) staff completed a review of the Initially Prepared Plan (IPP) submitted by June 1, 2010 on behalf of the Region F Regional Water Planning Group. The attached comments (Attachments A and B) follow this format:

- Level 1: Comments, questions, and online planning database revisions that must be satisfactorily addressed in order to meet statutory, agency rule, and/or contract requirements; and
- Level 2: Comments and suggestions for consideration that may improve the readability and overall understanding of the regional plan.

The TWDB's statutory requirement for review of potential interregional conflicts under Title 31, Texas Administrative Code (TAC) §357.14 will not be completed until submittal and review of adopted regional water plans.

Title 31, TAC, §357.11(b) requires the regional water planning group to consider timely agency and public comments. Section 357.10(a)(3) of the TAC requires the final adopted plan include summaries of all timely written and oral comments received, along with a response explaining any resulting revision or why changes are not warranted.





Mr. John Grant August 11, 2010 Page 2

Copies of TWDB's Level 1 and 2 written comments and the region's responses must be included in the final, adopted regional water plan.

If you have any questions, please do not hesitate to contact David Meesey of my staff at (512) 936-0852.

Sincerely,

Carolyn L. Brittin

Deputy Executive Administrator

Water Resources Planning and Information

CLB/DH/MN/TM/ao

Attachments(s)

c w/att: Ms. Simone Kiel, Freese and Nichols, Inc.

TWDB Comments on Initially Prepared 2011 Region F Regional Water Plan

LEVEL 1. Comments and questions must be satisfactorily addressed in order to meet statutory, agency rule, and/or contract requirements.

Executive Summary

- 1. Page ES-8, Section ES.3.2, line 2: "...to develop approximately 243,000 acre-feet per year of additional supplies by 2060..." does not reconcile with total water management strategy supply volume of 254,754 acft/yr presented on page ES-9, Table ES-1 or total water management strategy volume of 194,710 acft/yr presented in Table 4.10-1. Please revise as appropriate.
- 2. Page ES-8, Section ES.3.2, line 11; page ES-9, paragraph 1; and page ES-10 Figure ES-5: the total Region F water supply (current supplies with all water management strategies in year 2060) shown as 806,000 acft/yr does not reconcile with the sum of current water user group supply (610,000 acft/yr) and recommended water management strategy supply total (either 194,710 acft/yr, from Table 4.10-1; or 254,754 acft/yr, from Table ES-1), which would total either 804,710 acft/yr or 864,754 acft/yr, respectively. Please revise to reconcile these totals throughout the plan as appropriate.
- 3. Page ES-9, Table ES-1: "Desalination" year 2060 water management strategy volume of 16,050 acft/yr and capital cost of \$424,148,000 do not reconcile with Table 4.10-1 summary of recommended water management strategies volume of 6,550 acft/yr and cost of \$6,717,000. Please revise as appropriate.
- 4. Page ES-9, Table ES-1: "New Groundwater" 2060 water management strategy volume of 32,152 acft/yr and capital cost of \$126,333,990 does not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 26,152 acft/yr and cost of \$174,573,000. Please revise as appropriate.
- 5. Page ES-9, Table ES-1: "Infrastructure Improvements" capital cost of \$24,776,979 does not reconcile with Table 4.10-1 summary of recommended water management strategy cost of \$6,091,979. Please revise as appropriate.
- 6. Page ES-9, Table ES-1: "Reuse" capital cost of \$150,460,000 does not reconcile with Table 4.10-1 summary of recommended water management strategy cost of \$2,158,000. Please revise as appropriate, throughout plan (e.g. Figure ES-5).
- 7. Page ES-9, Table ES-1 & Figure ES-4: "Subordination" 2060 water management strategy volume of 72,830 acft/yr does not reconcile with Table 4.10-1 summary of

- recommended water management strategy volume of 33,486 acft/yr. Please revise as appropriate, throughout plan (e.g. Figure ES-5).
- 8. Page ES-9, Table ES-1: "Voluntary Redistribution" 2060 water management strategy volume of 28,158 acft/yr and capital cost of \$8,964,000 does not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 22,958 acft/yr and cost of \$0. Please revise as appropriate, throughout plan (e.g. Figure ES-5).
- 9. Page ES-9, Table ES-1: "Total" for All Recommended Water Management Strategies 2060 volume of 254,754 acft/yr and capital cost of \$827,377,639 do not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 194,710 acft/yr and cost of \$282,234,649. Please revise as appropriate, throughout plan (e.g. Figure ES-5).

Chapter 1

10. Please describe how the planning group explored opportunities and benefits of regional water supply facilities or providing regional management of regional facilities. [Title 31 Texas Administrative Code (TAC) §357.5(e)(6)]

Chapter 3

- 11. Please indicate whether any publicly available plans of major agricultural, municipal, manufacturing and commercial water users and any water management plans were considered. [31 TAC §357.5(k)(1)(E) §357.5(k)(1)(F)]
- 12. Page 3-4: Two of the groundwater sources listed in Table 3.1-1 and Appendix 3A appear to be the same, but are reference by different names, specifically Table 3.1-1 source "Pecos Valley" and Appendix 3A source "Cenozoic Pecos Alluvium". Please revise as appropriate.
- 13. Page 3-39: Hords Creek Lake "...diversion of 2,260 acre-feet per year" does not reconcile with page 3-35, Table 3.2-1 diversion volume of 2,240 acft/yr. Please revise as appropriate throughout plan.
- 14. Page 3-42, Table 3.2-2: Table does not indicate to which information the footnote (c) applies. Please revise as appropriate.
- 15. Page 3-43, Table 3.2-3: Table header does not specify whether the "WAM Supplies" listed are 'firm yield' or 'safe yield'. Please clarify in table.
- 16. Page 3-53, Table 3.5-1: CRMWD Ector County Well Field volume of 423 acft/yr for all decades does not reconcile with Appendix 3B volume of 440 acft/yr for all decades. Please revise as appropriate.

Chapter 4

- 17. It appears that total county 'balance' surpluses/shortages were calculated incorrectly throughout Chapter 4 tables by subtracting 'Total Demand' from 'Total Supply'. Please clarify that these are not water 'needs' (e.g. with a footnote) or revise to reflect total subcategory and county-wide water needs as the sum of the individual needs of each water user group in the county; needs that are calculated based on each water user group's own demands and supplies. [31 TAC §357.7(a)(4)(B)]
- 18. Page 4-2, last sentence: Indication that "On a water user group basis, the sum of the shortages is *over* 213,000 acre-feet per year in 2010..." does not reconcile with Table 4.1-1 year 2010 summation of shortages of 212,918acft/yr. Please revise as appropriate throughout plan.
- 19. Page 4-6, Table 4.1-1: Table incorrectly sums water 'needs' both horizontally (e.g. the Andrews County irrigation need of 12,875 acft/yr is apparently reduced to 12,818 acft/yr by incorrectly associating surplus water supplies from other water user groups that are not available to this water user group) and vertically (e.g. total needs for the region are presented as 183,933 acft/yr in 2010 whereas the correct net region total water needs in 2010 are 212,918 acft/yr). Please revise table to summarize and compile identified water needs appropriately.
- 20. Page 4-19, Table 4.2-3: Subordination water management strategy supply volume totals, by decade, in acft/yr of 43,303; 46,471; 29,394; 30,636; 30,877; 32,946) do not reconcile with Table 4.10-1 Subordination supply volume totals, by decade, in acft/yr of 43,890; 47,047; 29,961; 31,194; 31,427; 33,486. Please revise as appropriate.
- 21. Page 4-20, paragraph 1, line 6: All recommended water management strategies must indicate associated capital and annual costs. Please indicate whether the cost for the 'Subordination' water management strategy is zero or present any associated costs with the strategy.
- 22. Page 4-26, first sentence, last paragraph: Please reword text to clarify that implementation of Region F water municipal conservation provides water savings of 310 acft/yr rather than 509 acft/yr. This reconciles the strategy supply with the Appendix 4G, page 4G-1 value of 310 acft/yr for 2060 and reflects the fact that the remaining conservation savings appear to be associated with plumbing fixture savings that were embedded in the demand projections.
- 23. Page 4-28, Section 4.3.2, paragraph 1: 2010 and 2060 City of Ballinger water demands of 1,068 acft/yr and 1,337 acft/yr do not reconcile with Table 4.3.2 (page 4-29) values of 1,142 acft/yr and 1,329 acft/yr respectively. Please revise as appropriate.

- 24. Page 4-28, Section 4.3.2, paragraph 2: 2010 City of Ballinger water management strategy supply of 950 acft/yr does not reconcile with Table 4.3.2, page 4-29 value of 940 acft/yr and neither number reconciles with Appendix 4H, page 4H-3 tabular value of 917 acft/yr.
- 25. Page 4-29, Table 4.3-3: Table 'Comments' does not specify whether the "WAM yield" values listed are 'firm yield' or 'safe yield'. Please clarify.
- 26. Page 4-31: Section 'Voluntary Redistribution Hords Creek Reservoir to Ballinger (220 acft/yr for 2040 through 2060) and MDWSC to Ballinger (600 acft/yr for 2010 through 2040)' water management strategies do not appear to be included in the Summary of Recommended water management strategies (supply and cost data) in Appendix 4H under the category 'Voluntary Redistribution' located on the fourth (unnumbered) page of Appendix 4H. Please revise as appropriate.

Appendices

- 27. Appendix 4D, page 48: It appears that the final water management strategy in Appendix D is not assigned to any particular water user group or wholesale water provider. Please clarify.
- 28. Appendices 4H/4I: Appendix 4H is labeled "Water User Group Summary Tables" but appears to include four tables including a Summary of Recommended Strategies, Summary of Alternative Strategies, List of Potentially Feasible Strategies, and Water User Group Summary Tables. Table of Contents refers to appendix 4I which is not labeled in the appendices section the contents of which appear to be included at the beginning of Appendix 4H. Please revise Table of Contents and appendices labels regarding 4H and 4I to clarify locations of contents.
- 29. (Attachment B) Comments on the online planning database (i.e. DB12) are herein being provided in spreadsheet format. These Level 1 comments are based on a direct comparison of the online planning database against the Initially Prepared Regional Water Plan document as submitted. The table only includes numbers that do not reconcile between the plan (left side of spreadsheet) and online database (right side of spreadsheet). An electronic version of this spreadsheet will be provided upon request.

LEVEL 2. Comments and suggestions that might be considered to clarify or enhance the plan.

General Comment

1. Header on each page indicating "IPP Volume I" suggests that there may be another volume associated with plan. Please consider clarifying in header and/or Table of Contents and throughout plan (e.g. pages 1-64, 3-44, 4-24), if appropriate in the final adopted plan.

Chapter 4

2. Chapter 4: There is no reference in the Chapter 4 text to the associated Appendix 4F – Strategy Evaluation Matrix and Quantified Environmental Impact Matrix. Please consider including a reference in Chapter 4 directing readers to this data.

ATTACHMENT B

	REGION F	IPP doc	ıment						No	n-matching	numbers						
		refere				IPP do	ument nu	ımber				Online	Planning	Database	(DB12) nu	ımber	
gion IPP		Page	Table	non- decadal				2244		****	non- decadal	2010	****	2070	2010	2050	2000
Se .	Item	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060
	Colorado River Municipal Water District Total Demands	2-28	2.4-1		90,712	93,131	75,243	75,629	75,199	76,144 15,007		89,2 <u>12</u> 15,085	91,631 15,210	73,743 15,192	74,129 15,105	73,699 15,097	74,644 15,163
F	Brown County Water Improvement District #1 Total Demands City of San Angelo Total Demands	2-29 2-31	2.4-2		14,929	15,053	15,036	14,949 52,634	14,941 S3,196	53.746		15,085	15,210	15,192	52,586	52,953	53,265
F	Andrews Co. Pecos Valley Rio Grande	3-4	3.1-1	1,189				32,034	33,190			191	191	191	192	192	192
٠	Andrews Co. Dockum Colorado	3-4	3.1-1	905								22	22	22	22	22	22
٤	Andrews Co. Dockum Rio Grande	3-4	3.1-1	5,792								_NA	NA	NA	NA	NA	NA
۶	Andrews Co. Ugailala Colorado	3-4	3.1-1	31,279								24,886	24,886	24,886	25,373	25,363	25,350
	Andrews Co. Ogallala Rio Grande	3-4	3.1-1	4,333								NA.	NA	NA	NA	NA	NA
F	Andrews Co. Eds-Trinity Colorado	3-4	3.1-1	4,640							2.005	25	25	25	25	25	25
F	Groundwater Supply -Brown-Trinity Aquifer	3-4	3.1-1	2,045							2,085						
F	Groundwater Supply -Coleman-Ellenberger-San Saba Groundwater Supply -Crane-Other Aquifer	3-4	3.1-1	NA .	-						81		_				
F	Ector-Pecos Valley	3-4	3.1-1	2,904							3,143						
F	Irion - Dockum	3-4	3.1-1		_						928						
F	Mitch ell-Other Aquifer	3-4	3.1-1	NA							2						
F	Pecos-Capitan Reef	3-4	3.1-1	34,000							NA						
	Pecos-Rustler Aquifer (db12)	3-4	3.1-1	NA NA							1,389			_			
	Pecos Other Aquifer (db12)	3-4	3.1-1	NA NA							5						
	Reeves-Rustler Aquifer (db12) Runnels- db12 Other Aquifer	3-4	3.1-1 3.1-1	NA NA						_	103 2,656						
	Scurry-db12 -Other Aquifer	3-4	3.1-1	NA NA							314						-
	Sterling-Other Aquifer (db12)	3-4	3.1-1	NA NA							997			_			
	Winkler- Dockum Aquifer	3-4	3.1-1	10,746							10,748						
F	Groundwater Supplies in Region F	3-6	3.1-1		NA	NA	NA	NA	NA	1,170,823		1,157,501	1,157,508	1,157,504	1,157,491	1,157,468	1,157,453
	Currently Available Supplies to WUGs/Co- Brown	3-51	3.4-1		21,694	21,784	21,787	21,752	21,764	21,821		21,750	21,840	21,843	21,808	21,820	21,877
F	Coke	3-51	3.4-1		2,094	2,072	2,345	2,307	2,288	2,253		2,228	2,181	2,415	2,401	2,372	2,327
	Coleman	3-51	3.4-1		2,906	2,891	2,888	2,886	2,885	2,881		2,806	2,791	2,760	2,786 7,185	2,785 7,129	2,781 7.129
F F	Concho Ector	3-51 3-51	3.4-1		7,001	6,994 44,770	7,032 53,358	7,021 54,244	6,909 55,272	6,909 55,908		. 7,035 48,048	7,172	7,191 53,197	54,079	55,110	55,455
-	McCulloch	3-51	3.4-1		9,644	9,737	9,889	9,941	9,790	9,889		9,449	9,530	9,64	9,708	9,665	9,764
	Runnels	3-51	3.4-1		4,854	4,859	4,899	4,899	4,825	4,556		4,953	4,948	5,102	5,090	4,701	4,732
	Tom Green	3-51	3.4-1		74,516	74,295	74,186	73,972				74,429	74,207	14,041	73,822		
	Total Supply to Water Users	3-51	3.4-1		619,575	615,264	615,446	611,147	610,509	609,822		619,443	615,208	615,315	611,004	610,358	609,670
	Andrews Co. Direct Reuse	NA NA	NA		NA	NA	NA.	NA	NA	NA		560	560	560	560	560	560
	Concho Co. Direct Reuse	NA	NA		NA	NA NA	NA	NA	NA	NA		3,000	220 3,150	220 3,300	220 3,450	220 3,600	3,750
	Ector Co. Direct Reuse Midland Co. Direct Reuse	NA NA	NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		5,987	5,987	5,987	5,987	5,987	5,987
	Runnels Co. Direct Reuse	NA NA	NA NA		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		218	218	218	218	218	218
	Tom Green Co. Direct Reuse	NA NA	NA NA		NA NA	NA NA	NA NA	NA	NA	NA NA		8,500	8,500	8,500	8,500	8,500	8,500
	Ward Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		670	670	670	670	670	670
F	Total Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		19,015	19,305	19,455	19,605	19,755	19,905
	Currently Available Supply - WWP- Brown Co WID #1	3-53	3.5-1		29,712	29,712	29,712	29,712	29,712	29,712		29,868	29,868	29,868	29,868	29,868	29,868
	""-CRMWD-Ector Co Well Field	3-53	3.5-1		423	423	423	63,000	60,950	59,600		66,874	65,524	64,018	62,676	440 61,336	60,006
	""CRMWD-Lake Ivie	3-53	3.5-1		66,350 560	65,000 560	636,S20 560	560	560	59,600		34	34	34	34	34	3.4
F	""EV Spense ""City of Odessa- Ward Co Field	3-53 3-53	3.5-1		4,800	NA NA	NA NA	NA NA	NA S60	NA S60		4,800			- 59		- 3"
F	"" City of Odessa-CRIVIWD System	3-53	3.5-1		13,439	13,191	20,793	20,778	21,177	21,047		14,139	13,691	21,388	20,978	21,277	21,047
F	""-University Lamas- Midland Paul Davis Well Field	3-53	3.5-1		4,722	4,722	4,722					NA	NA	NA	NA	NA	NA
F	"" University Lands- City of Andrews Well Field	3-53	3.5-1		671	708	730	-		-		1,908	1,945	1,967	0	0	0
	Andrews County Total Needs	4-6	4.1-1		(12,818)							(12,875)					
	Borden County Total Needs	4-6	4.1-1		(1,520)							(1,847)					
	Brown County Total Needs	4-6	4.1-1		(2,369)				-		+	(3,006)					
F	Coke County Municipal Needs Coke County Total Needs	4-6	4.1-1		(870)							(875)					
F	Coleman County Municipal Needs	4-6	4.1-1		(359)		-					(1,304)	-				
F	Coleman County Total Needs	4-6	4.1-1		(1,730)							(2,675)					
F	Concho County Municipal Needs	4-6	4.1-1		122							(4)					
F	Concho County Total Needs	4-6	4.1-1		1,090							(4)					
	Ector County Total Needs	4-6	4.1-1		(5,508)							(5,694)					
	Howard County Municipal Needs	4-6	4.1-1		(1,350)							(1,394)					
F	Howard County Total Needs	4-6	4.1-1		(1,864)							(1,9/1)					

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ig ltem	Page number	Table number	non- decadal number	2010	2020	2030	2040	2050	2060	non- decada! number	2010	2020	2030	2040	2050	2060
F Irion County Total Needs	4-6	4.1-1		(1,292)							(1,302)					
F Kimble County Total Needs	4-6	4.1-1		(825)							(1,644)					
F Martin County Total Needs F McCulloch County Municipal Needs	4-6 4-6	4.1-1		(1,149)							(1,180)		_			
F McCulloch County Total Needs	4-6	4.1-1		2,348							(1,004)	= =				
F Mitchell County Total Needs	4-6	4.1-1		(4,942)							(5,023)	- 1				
F Reagan County Total Needs	4-6	4.1-1		(10,990)						- 10	(10,997)					├
F Reeves County Total Needs F Scurry County Total Needs	4-6 4-6	4.1-1		(36,085)							(36,097)					
F Tom Green County Municipal Needs	4-6	4.1-1		(8,724)							(9,225)					
F Tom Green County Total Needs	4-6	4.1-1		(58,506)							(59,084)					
F Upton County Irrigation Needs F Upton County Total Needs	4-6 4-6	4.1-1		(10,640)							(10,672)					
F Region F Total Irrigation Needs	4-6	4.1-1		(163,800)							(10,672)					\vdash
F Region F Total Mining Needs	4-6	4.1-1		2,107							(503)					
F Region F Total Municipal Needs	4-6	4.1-1		(12,162)							(22,055)					
F Region F Total Steam Electric Needs F Region F Total Needs	4-6	4.1-1		(6,568)							(7,095) (212,918)			-	_	
F Andrews County Total Needs	4-7	4.1-2	_	(165,555)		(12,652)					(212,510)		(12,707)			
F Borden County Total Needs	4-7	4.1-2				(1,462)							(1,839)			
F Brown County Total Needs	4-7	4.1-2				(2,330)							(2,946)			
F Coke County Municipal Needs F Coke County Total Needs	4-7	4.1-2	_			(23) (675)	_			_			(28)	-		
F Coleman County Municipal Needs	4-7	4.1-2				(317)							(1,270)			
F Coleman County Total Needs	4-7	4.1-2				(1,689)							(2,642)			
F Ector County Total Needs F Howard County Municipal Needs	4-7	4.1-2			_	(9,473)							(9,640)			
F Howard County Municipal Needs	4-7	4.1-2	_			36 210				-			(34)			
F Irion County Total Needs	4-7	4.1-2				(1,166)							(1,181)			
F Kimble County Total Needs	4-7	4.1-2				(852)							(1,749)			
F Martin County Total Needs F McCulloch County Municipal Needs	4-7	4.1-2				(680)							(751) (990)			
F McCulloch County Total Needs	4-7	4.1-2				2,462							(990)			
F Mitch ell County Total Needs	4-7	4.1-2				(4,469)							(4,670)			
F Reagan County Total Needs	4-7	4.1-2				(10,109)							(10,116)			
F Reeves County Total Needs F Runnels County Municipal Needs	4-7	4.1-2				(34,371)				-			(34,387)			
F Runnels County Total Needs	4-7	4.1-2			-	(3,021)							(3,031)			
F Scurry County Total Needs	4-7	4.1-2				1,304							(10)			
F Tom Green County Municipal Needs	4-7	4.1-2				(10,266)							(10,564)			
F Tom Green County Total Needs F Upton County Irrigation Needs	4-7	4.1-2 4.1-2				(60,423)							(10,223)			
F Upton County Total Needs	4-7	4.1-2				(9,659)							(10,223)			
F Region F Total Irrigation Needs	4-7	4.1-2				(155,380)							(174,774)			
F Region F Total Manufacturing Needs F Region F Total Mining Needs	4-7	4.1-2				(3,735)							(3,747)			
F Region F Total Municipal Needs	4-7	4.1-2				(26,835)						_	(36,117)			
F Region F Total Steam Electric Needs	4-7	4.1-2				(10,787)							(11,380)			
F Region F Total Needs	4-7	4.1-2				(194,340)							(226,047)			
F Andrews County Total Needs F Borden County Total Needs	4-8	4.1-3					-		(11,666)							(11,719)
f Brown County Total Needs	4-8	4.1-3							(2,163)							(2,841)
F Coleman County Municipal Needs	4-8	4.1-3							(276)							(1,241)
F Coleman County Total Needs	4-8	4.1-3							(1,648)							(2,613)
F Ector County Total Needs F Howard County Municipal Needs	4-8	4.1-3							(19,865) (720)			-				(20,012)
F Howard County Numicipal Needs	4-8	4.1-3							(890)							(1,330)
F Irion County Total Needs	4-8	4:1-3							(963)							(1,000)
F Kimble County Municipal Needs	4-8	4.1-3							(904)							(910)
F Kimble County Total Needs F Martin County Total Needs	4-8 4-8	4.1-3		+					(895)	-						(1,909) (393)

REGION F	IPP doc	umant						No	n-matching	numbers						
	refere				IPP do	cument n	umber				Online	Planning	Database	(DB12) no	ımber	
ddi voids ltem	Page number	Table number	non- decadal number	2010	2020	2030	2040	2050	2060	non- decadal number	2010	2020	2030	2040	2050	2060
McCulloch County Municipal Needs	4-8	4,1-3	Hamber	2010	2020		2010		(960)	IIdilliber	2020	Long	1000			42,030)
F McCulloch County Total Needs	4-8	4.1-3							2,494							(1,038)
F Mitchell County Total Needs	4-8	4.1-3							(3,707)							(4,140)
F Reagan County Total Needs	4-8	4.1-3							(8,386)						- 3	(8,393)
F Reeves County Total Needs F Scurry County Total Needs	4-8	4.1-3 4.1-3					_	_	(31,829 <u>)</u> 951							(348)
F Tom Green County Municipal Needs	4-8	4.1-3							(11,321)		· -					(11,633)
F Tom Green County Total Needs	4-8	4.1-3							(62,004)							(62,367)
F Upton County Irrigation Needs	4-8	4.1-3							(9,495)							(9,539)
F Upton County Total Needs	4-8	4.1-3					_		(9,030)							(9,539) (166,120)
F Region F Total Irrigation Needs F Region F Total Mining Needs	11-8	4.1-3 4.1-3		-			_	_	(141,535) 1,875		-					(375)
F Region F Total Municipal Needs	4-8	4.1-3		-					(39,963)	-						(49,636)
F Region F Total Needs	4-8	4.1-3							(205,321)							(241,856)
F Colorado River Municipal Water District Needs	4-9	4.1-4		(16,227)	(25,196)	(8,658)	(10,394)	(11,314)	(13,609)		(14,729)	(23,698)	(8,138)	(9,242)	(9,954)	(12,229)
F City of Odessa Needs	4-9	4.1-4		(4,488)	(10,176)	(4,118)	(5,215)	(6,085)			(3,788)	(10,216)	(3,523)	(5,015)	(5,985)	(24.255)
F City of San Angelo Needs	4-9	4.1-4		(16,227)	(25,196)	(8,658)	(33,188)	(33,973)	(34,746) (13,609)	ļ——	(14,729)	(23,698)	(8,138)	(33,1 <u>40)</u> (9,242)	(33,730)	(34,265)
F Colorado River Municipal Water District Needs F City of Odessa Needs	NA NA	Appendix 38 Appendix 38		(4,488)	(10,176)	(4,118)	(5,215)	(6,085)	(13,609)		(3,788)	(10,216)	(3,523)	(5,015)	(5,985)	(12,223)
F Subordination - Coleman - Coleman Co - Lake Coleman	4-18	4.2-3		2,063	2,075	2,080	2,087	2,089	2,091		1,650	1,651	1,647	1,645	1,639	1,631
F Subordination - Manufacturing-Ector Co - CRMWD	4-18	4.2-3		66	149	3	46	86	158		366	449	108	396	386	408
F Subordination - Manufacturing-Kimble Co - Llano River not listed in		4.2-3		NA	NA	NA NA	NA NA	NA	NA		1,000	1,000	1,000	1,000	1,000	1,000
F Subordination - Miles - Runnels Co - OC Fisher Reservoir	4-19	4.2-3		100	100	100	100	100	100		140	153	163	173	183	193
F Subordination -Snyder - Scurry Co - CRMWD	4-19	4.2-3		511	46,471	29,394	30,636	30,877	32,946		513 43,889	47,044	29,902	31,374	31,810	33,829
IF Subjection -Total	4-19	4.2-3		43,303	46,471	29,394	30,636	30,877	32,946		43,089	47,044	25,502	31,3/4	31,810	33,629
F Ballinger - Subordination-Ballinger	4-29 , 4-30 & 4-41	43-3 , 4.3-4 & 4.3-8		940							917					1
F Ballinger - Subordination of downstream rights to CRMWD is not lis		4.3-8		343	356	227	243	0	0	-	NA NA	NA	NA	NA	NA	NA
F Ballinger - CRMWD System not listed in DB12	4-41	4.3-8		257	244	373	357	0	0		NA	NA	NA	NA	NA	NA
F Winters - Subordination	4-43	4.3-11		720					670		552					591
F Reuse Cost	4-48	4.3-14							258,000							69,960
f Subordination to Lake Winters	4-48	4.3-14	_	720 720	710 710	700 700	690 800	790	670 780		552 552	561 561	566	571 681	575 685	591 701
T Winters WMS Totals F City of Winters Cost for Reuse	4-48 4-48	4.3-14 4.3-15		720	710	700	800	790	258,000		332	361	300	001	003	69,960
F Bronte - Rehabilitation of Pipeline	4-52	4.3-18		0	0	0	0	0	0		129	129	129	129	129	129
F City of Bronte Cost for Rehab of Oak Creek pipeline	4-56	4.3-21	1,238,600	21,600	21,600					1,955,000						
F Robert Lee - Direct Reuse WMS	4-60	4.3-23	2,158,000							na						
F Robert Lee - Brush Control Cost - not listed in IPP	4-68	4 3-30		NA	NA	NA I	NA DZG	NA .	NA .	114,070	19,000	19,000	19,000 6,993	19,000 6,982	19,000	1 <u>9,000</u> 6,951
F City of Menard Conservation Cost F City of Menard Off Channel Reservoir	4-71 4-77	4.3-32 4.3-35	24,520,000	8,755	13,526	13,146	12,776	12,414	12,190	25,273,000	2,183	7,018	6,993	6,982	6,961	6,931
F City of Menard Off Channel Reservoir F City of Menard Conservation Cost	4-77	4.3-35	24,520,000	8,755	13,526	13,146	12,776	12,414	12,190	23,273,000	2,183	7,018	6,993	6,982	6,961	6,951
F City of Midland Develop Aquifer Supplies	4-82	4.3-39	468,507,000	5,.55	20,020	25,2-10		-22,124	,	168,507,000		-,	-,	-,		
F City of Midland Develop Aquifer Supplies	4-82	4.3-39						4,648,500	4,648,500						4,651,200	
F Midland-Subordination-WMS Supply	4-87	4.3-41		4,656	6,113	-156	-266	-378	-490		4,505	6,055	0	0	0	0
F Midland-Voluntary Redistribution-Annual Cost	4-88	4.3-42				4,790,000	4,694,200	4,598,400	4,502,600				4,772,088 24,628,619	4,676,646 24,523,323	4,581,204 9,724,465	4,485,763 9,621,750
F Midland-Annual Cost Totals F City of Midland Redistribution	4-88 4-88	4.3-42			_	4,790,000	4,694,200	9,738,961	9,635,997 4,502,600	_			24,028,019	24,323,323	3,724,400	3,021,/30
F Coleman-Subordination WMS Supply	4-88	4.3-42		2,200	2,200	2,200	2,200	2,200	2,200		2,030	2,031	2,027	2.025	2,019	2,011
F Brady-Subordination WMS Supply	4-98	4.3-52		1,350	1,350	1,350	1,350	1,350	1,350		2,170	2,170	2,170	2,170	2,170	2,170
F City of Eden Cost for replacent wells	4-106	4.3-55	1,800,000							1,367,372						
F City of Eden Cost for Advanced Treatment	4-109	4.3-57	2,582,000							4,382,000						
F City of Eden- Cost of Recommended Strategies for Hickory Aquifer	4-121	4.3-65	1,367,372	200.2**	200.211	204.204	204.201	204.201	204.265	1,703,979.00	234,154.37	234,15417	86,154.37	86,154.37	86,154, 3,7	86,154.37
Richland SUD-Cost of Recommended Strategies for Hickory Aquifer City of Melvin -Cost of Recommended Strategies for Hickory Aquifer	4-121 4-121	4.3-65 4.3-65	977,829 325,139	308,311 102,392	308,311	384,361 102,392	384,361 102,392	384,36 <u>1</u> 102,392	384,361 102,392	1,703,979.00	234,154.37 na	234,134 <u>27</u>	00,134.37	na 86,154.37	86,154,37 na	na 86,154.37
F Live Oak Hills Subdivision -Cost of Recommended Strategies for Hills	4-121	4.3-65	88,804	288,819	288,819	288,819	288,819	288,819	288,819	na	na	na	na	na	-	na
F Kimble Co Manufacturing Cost not listed in JPP	4-129		55,504	NA	NA	NA.	NA NA	NA	NA	0	0	0	0	0	0	0
F Iron Co Irrigation Conservation WMS Supply	4-144	4.6-5			36							37				
F Scurry Co Irrigation Conservation WMS Supply	4-144	4.6-5			572							571				
F Sterling Co irrigation Conservation WMS Supply	4-24/	4.6-5			44							45		-	-	
F Tom Green Co Irrigation Conservation WMS Supply	4-144	4.6-5 4.6-5			5,690 195							5,774 194	-	-		
F Winkler Co Irrigation Conservation WMS Supply	4-144	4.6-5			132							1,74				

	REGION F			Non-matching numbers													
	REGION F	IPP doc	ıment	-					NO	n-matching	numbers						
		refere				IPP do	cument n	umber				Online	e Planning	Database	(DB12) n	umber	
۵				non-							non-				(
9		Page	Table	decadal							decadal						
1 5	ltem	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060
E	Costs for Roberts Co Area	4-163	4.8-8	768,821,000	2010	2020	2030	2040	2030	\$25,000.00	na	2010	2020	2030	2040	2030	na
	City of Snyder-Potiential Water Conservation Summary	4-165	4.8-9	700,021,000	\$56,052.00	\$61,357	\$59,809.00	\$57,823.00	\$55,694.00	\$54,185.00		13,976.00	18,898.0	18,973.00	19,026.00	18,969.00	
£	CRMWD-Cost for Supplemental Well	4-171	4.8-14	522,000							па						
F	Color ado River Municipal Water District Cost for Desalination	4-170 4-173	4.8-13	119,617,000			8.460.000				131,603,990 76,268,000						
1	Colorado River Municipal Water District Cost for new well field University Lands Contract	4-1/3	4.8-16 4.8-16	73,994,000		847,000	8,460,000	8,460,000 65,000	8,460,000 65,000	2,009,000 65,000	76,268,000		<u> </u>	8,666,000	8,666,000	2,017,000	2,017,000
F	Colorado River Municipal Water District Cost for Desalination	4-173	4.8-16	119,617,000		847,000	847,000	6,340,378	6,340,378	6,340,378	131,603,990				13,721,167	2,384,500	2,384,500
٤	Supplemental Wells	4-173	4.8-16	12,528,000		200,000	400,000	416,000	432,000	448,000				100			
F	conty of same and the comment of party beganing	4-182	4.8-20	40,424,000												5.34	
	City of San Angelo McCuiloch Co Well Field Cost Irrigation Sutton Co. Cost (summed incorrectly)	4-184	4.8-21	157,126,000							173,307,000 194,940					H	
	CRMWD Reuse cost	NA NA	4.10-1	164,160 148,302,000							128,748,000			_	_		<u> </u>
	CRMWD Supplemental Wells cost	NA.	4.10-2	12,528,000							-						
	CRMWD Desalination cost	NA	4.10-2	119,616,990							131,603,990						
_	CRMWD Total cost	NA	4.10-2	365,678,990							345,583,990						
	San Angelo-Subordination WMS Supply Bronte - Rehabilitation of Pipeline Supply	4-191 4.206	4.8-25 4.10-1		11,791	11,472	11,153	10,835	10,516	10,196 0		16,189 129	15,766 129	15,344 129	14,922	14,230 129	14,077 129
F	Robert Lee-New WTP and Storage Facilities WMS Supply not listed	4.206	4.10-1		0	0	0	0	0	0	_	200	200	200	200	200	200
F	Coke County Total	4.206	4.10-1		680	727	514	612	712	847		1,009	1,056	843	941	1,041	1,176
F	Coleman · Coleman Co - Conservation WMS	4.206	4.10-1		SO	109	141	163	181	187		33	75	90	95	101	107
F	Coleman Co WMS Total	4.206	4.10-1		3,597	3,645	3,668	3,681	3,691	3,687		3,580	3,611	3,617	3,613	3,611	3,607
-	Eden-Concho Co-Replacement Well not listed in IPP Concho County Total	4.206	4.10-1 4.10-1		NA 34	NA 1,182	NA 1,889	NA 1,895	NA 1,962	NA 1,962		322 356	322 1,504	322 2,211	322 2,217	322 2,284	322 2,284
F	Ector Co Manufacturing-Reuse WMS is not listed in IPP	4.207	4.10-1		NA NA	NA	NA	NA	NA	NA		0	350	105	350	300	250
	Ector Co Manufacturing-Subordination WMS	4.207	4.10-1		66	149	3	46	86	158		366	449	108	396	386	408
	Odessa-Ector Co-Reuse	4.207	4.10-1		0	4,293	4,273	7,262	4,258	4,256		_0	3,943	4,168	3,912	3,958	4,006
F	Odessa-Ector Co-Conservation	4.207	4.10-1		540	1,168	1,488	1,657	1,854	2,074		551	1,200	1,536	1,715	1,920	2,149
F	Odessa-Ector Co-Voluntary Redistribution Odessa-Ector Co-Voluntary Redistribution (Develop Aquifer + New/	4.207 4.207	4.10-1 4.10-1			4,708	4,708	10,507	10,502	10,498			4,800	10,800	4,708 10,800	4,708 10,800	4,708 10,800
F	Ector County Total	4.207	4.10-1		5,425	16,809	11,057	18,225	19,403	21,297		5,725	17,109	16,962	18,575	19,703	21,547
F	Richland SUE-Bottled Water Program WMS Supply	4-208	4.10-1		0	0	0	0	0	0		1	1	1	1	1	i
F	Richland SUE-Infrastructure Improvement WMS Supply	4-208	4.10-1		0	0	0	0	0	0		113	113	113	113	113	113
F	McCulloch County Total Midland-Subordination-WMS Supply (CRMWD)	4-208	4.10-1	-	2,314	2,640	2,779	2,880	2,937	2,946		2,428	2,754	2,893	2,914	3,051	3,060
F	Midland County Total	4-208 4-208	4.10-1		4,488	6,055	0 35,719	0 35,864	35,793	35,751		4,488	6,152 16,255	211 36,130	324 36,188	438 36,231	553 36,304
_	Ballinger-Runnels Co-Subordination-CRMVVD-not listed in DB12	4-209	4.10-1		343	356	227	243	0	0			NA:	PtA:	NA NA	NA NA	NA NA
	Miles-Runnels Co-Subordination	4-209	4.10-1		100	100	100	100	100	100		140	153	163	173	183	193
	Runnels Co Total	4-209	4.10-1		2,402	2,487	2,315	2,421	2,813	2,806		2,099	2,184	2,151	2,251	2,896	2,899
	Snyder-Scurry Co-Subordination Scurry County Total	4-209 4-209	4.10-1 4.10-1		511 635	-			-	_	_	637	-				
F	Sterling Co Irrigation Conservation WMS Supply	4-209	4.10-1				1 - /4 -	90	91	92		037			89	89	89
F	San Angelo-Tom Green Co-Infrastructure Improvement WMS	4-209	4.10-1		2,274	2,261	2,247	2,233	2,220	2,206		2,308	2,295	2,281	2,267	2,254	2,240
F	Tom Green Co Total	4-209	4.10-1		27,490	40,555	49,411	56,711	56,340	56,289		27,524	40,589	49,445	56,745	56,374	56,323
	Conservation WMS Total Subordination WMS Total	4-209 4-209	4.10-1 4.10-1		3,214 43,890	43,147	80,602 29,961	81,210	81,851 31,427	82,506 33,486		3,197 43,889	43,113	80,551 30,113	81,141 31,698	81,769	82,423 34.382
	Bottled Water Program WM5 Total	4-209	4.10-1		43,890	0	29,961	31,194	0	0		43,889	47,141	30,113	31,698	32,248 1	34,382
	Infrastructure Improvement WMS Total	4-209	4.10-1		2,274	2,261	2,247	2,233	2,220	2,206		2,437	2,424	2,410	2,396	2,383	2,369
	Total for All Strategies	4-209	4.10-1		58,494	127,208	174,442	190,499	192,234	194,710		59,275	128,067	181,342	191,733	193,772	196,322
	CRMWD-Renew Contract WMS	4-210	4.10-1		0	5,200	5,200	5,200	5,200	5,200		392	5,022	15,629	15,430	16,119	15,932
	CRMWD -Subordination WMS Supply CRMWD Total	4-210	4.10-1		48,027	47,133	46,240	45.347	44,453	43,560		47,618	46,809	36,022	35,443	33,975	33,381
	University Lands - New/Renew Water Supply Contract	4-210	4.10-1 4.10-1	_	48,027 NA	64,713 NA	69,830 Ast	78,427 NA	77,533 NA	76,640 NA		48,010 0	5,200	70,031 5,200	78,753 5,950	77,974 5,960	77,193 5,973
	WWP WMS Totals	4-210	4.10-1		66,473	89,537	97,622	113,506	112,021	111,076		84,954	125,541	133,699	151,761	151,521	152,545
F	San Angelo -WWP	4-211	4.10-2	254,904,000						,	na			,		,	,
	Brown C-O Brownwood Lake	App. 34-3	App 3A		229	229	223	214	211	211		385	385	379	370	367	367
	Brown Co. Zephyr WSC Brownwood Lake	App. 3A-4	App 3A		616	616	616	616	616	616		516	516	516	516	516	516
	Coke Co. Bronte Village Other Aquifer Coleman Co. Santa Anna Brownwood Lake	App. 3A-7	App 3A App 3A		116 307	129 307	125 307	121 307	120 307	120 307		250 207	238 207	226	215	204	194 207
	Concho Co. Eden Direct Reuse	App. 3A-8	Арр ЗА		- 1			-	- 307	- 307		80	220	220	207	220	220
	Concho Co. Millersville-Doole WSC CRAMMD	App. 3A-8	App 3A		92	85	123	112				46	43	62	56		
۶	Ector Co. Mfg Colorado 8asin CRMWD	App. 3A-12	App 3A		177	297	604	702	77:1	813		877	797	1,199	902	871	813

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REGION F								No	n-matching	thing numbers								
	IPP doc refere				IDD do	cument nu	ımbar				Onlina	Planning I	Databaco	/DP13) ni	ımbar			
	refere	ence:	non-		IPP 00	cument no	ımber			non-	Offliffe	Planning I	Database	(DBIZ) III	mber			
- d	Page	Table	decadal							decadal								
item (tem	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060		
F Ector Co. Odessa CRMWD	Арр. 3А-12	Арр ЗА	Training.	11,949	11,350	17,464	17,158	17,354	17,159		11,176	10,757	16,708	16,793	17,092	17,006		
F McCulloch Co. Brady Hickory Aquifer	App. 3A-19	Арр ЗА		1,009	1,009	1,009	1,009	1,009	1,009		884	884	884	884	884	884		
F McCulloch Co. Millersville Doole WSC CRMWD F Runn els Co. Ballinger O.H. Ivie Lake	App. 3A-19 App. 3A-28	App 3A		161	164	238	216				91 257	82 244	119 373	108 357		\vdash		
F Runnels Co. Miles Other Aquifer	App. 3A-29	App 3A App 3A		134	134	134	134	134	134		10	10	10	10	10	. 10		
F Runnels Co. Millersville-Doole WSC CRMWD	App. 3A-29	Арр ЗА		69	62	93	85				35	31	47	43				
F Tom Green Co. Millersville-Doole WSC CRMWD	App. 3A-36	App 3A		174	176	290	300				87	88	145	150				
F Brown County WID Brownwood Lake F CRMWD Total Current Supply	NA NA	App 3B App 3B		29,712 74,485	29,712 67,935	29,712 66,585	29,712 65,235	29,712 63,885	29,712 62,535		29,644 74,468	29,641 67,918	29,648 66,568	29,505 65,218	29,016 63,868	28,525 62,518		
F Ballinger cost for reuse	2 of 48	appendix 4D	2,567,000	324,000	07,323	00,505	55,255	03,003	02,555			07,510	00,500	05,210	03,000	02,510		
F Big Spring cost for reuse	6 of 48	appendix 4D	9,911,000	1,529,000							-							
F Bronte cost for rehab of Oak Creek Pipeline	8 of 48	appendix 4D	102 221 000	34,100												\vdash		
F CRMWD cost for Southwest Pecos Co to Odessa F City of Eden Cost for Advanced Treatment	11 of 48 18 of 48	appendix 4D appendix 4D	183,321,000 2,582,000	22,279,000						4,382,000	-							
F City of Eden Cost for replacent wells	19 of 48	appendix 4D	1,800,000							1,367,372								
F City of Eden Cost for Bottled Water program	20 of 48	appendix 4D		24,000						Crem-2	38,566	38,566	38,566	38,566	38,566	38,566		
F Cost of Odessa-Midland Reuse F Robert Lee cost of new groundwater from Alluvium	28 of 48 35 of 48	appendix 4D	109,194,000	13,272,000						-	396,500	396,500	25,950	25,950	25,950	25,950		
F San Angelo cost of Desal	37 of 48	appendix 4D appendix 4D		9,223,930							390,300	396,300	23,930	2,648,800	2,648,800			
F San Angelo cost of Desal phase II	38 of 48	appendix 4D	40,327,000	12,039,500										-,,	-,,-			
F Snyder Cost for reuse	47 of 48	appendix 4D	9,643,000	1,104,000														
F Irrigation Costs for Irion Co. F Irrigation Costs for Mitchell Co.	2 of 6	appendix 4E appendix 4E			1,536 185,113							91,536 285,113						
F Irrigation Costs for Ward Co.	6 of 6	appendix 4E			103,113	31,803			_			200,110	121,803					
13/2		WMS																
	i	Summary of												İ				
F CRMWD cost for reuse	appendix 4H	Rec. Strategies	148,302,000							128.748,000								
- Chille Con lot lead	appendix 411	Summary of	140,502,000			_				120,740,000								
]	Rec.				i				1								
F CRMWD Supplemental Wells cost F Bottle Water Program (McCulloch C-O) WMS Supply	appendix 4H Appendix4H	Strategies Summary	12,528,000	0	0	0	0	0	0		0	0	0	0	0	0		
F Bottle Water Program (McCulloch C-O) WMS Supply F Bottle Water Program Richland SUD) WMS Supply	Appendix4H	Summary		0	0	0	0	0	0		1	1	1	1	1	1		
F New Infrastructure Improvement - Bronte WMS Supply	Appendix4H	Summary		0	0	0	0	0	0		129	129	129	129	129	129		
F New Infrastructure Improvement - San Angelo WMS Supply	Appendix4H	Summary		2,274	2,261	2,247	2,233	2,220	2,206		2,308	2,295	2,281	2,267	2,254	2,240		
F Reuse-Odessa (Ector Co.) - WMS Supply F Reuse-Manufacturing(Ector Co.) WMS Supply	Appendix4H	Summary :			4,293 NA	4,273 NA	4,262 NA	4,258 NA	4,256 NA			3,943	4,168 105	3,912 350	3,958	4,006 250		
F Subordination-Coleman (Coleman Co.) WMS Supply	Appendix4H Appendix4H	Summary		1,650	1,651	1,647	1,645	1,639	1,631		2,030	2,031	2,027	2,025	2,019	2,011		
F Subordination-Manufacturing (Ector Co.) WMS Supply	Appendix4H	Summary		66	149	3	46	86	158		366	449	108	396	386	408		
F Subordination-Midland (Midland Co) WMS Supply	Appendix4H	Summary		4,488	6,055	0	0	.0	.0		4,505	6,055	0	0	0	0		
F Subordination-Midland (Midland Co) WMS Supply F Subordination-Miles-Runnels Co-WMS Supply	Appendix4H Appendix4H	Summary		17	-97 100	-211 100	-324 100	-438 100	-553 100		NA 140	NA 153	NA 163	NA 173	NA 183	NA 193		
F Subordination-Snyder-Scurry Co-WMS Supply	Appendix4H	Summary		511	100	100	100	100	100		513	133	103	1/3	103	193		
F Subordination-CRMWD WMS Supply	Appendix4H	Summary		35,166	30,548	46,240	43,696	41,857	38,746		47,618	46,809	36,022	35,443	33,975	33,381		
F Voluntary Redistribution - CRMWD WMS Supply	Appendix4H	Summary		0	5,200	5,200	5,200	5,200	S,200		392	5,622	15,629	15,430	16,119	15,932		
F Ballinger-Subordination-CRMWD-not listed in DB12 F Ballinger WMS Total	Appendix4H Appendix4H	1 of 99		141	169 1,187	68 1,095	115	0 1,524	0 1,542		NA 9S0	NA 1,018	NA 1,027	NA 1,029	NA 1,631	NA 1,634		
F Ballinger Alternative WMS Supply - Direct Reuse not listed in DB12	Appendix4H	1 of 99		220	220	220	220	220	220		NA.	NA	NA	NA NA	NA NA	IVA		
F Bronte - Rehabilitation of Pipeline WMS Supply	Appendix4H	5 of 99		0	0	0	0	0	0		129	129	129	129	129	129		
F Bronte WMS Total E Coleman-Conservation WMS Supply	Appendix4H	5 of 99		145	174	177	177	179	180		274	303	306	306	308	309		
F Coleman-Conservation WMS Supply F Coleman-Subordination-Coleman Lake WMS Supply	Appendix4H Appendix4H	6 of 99 6 of 99		50 6,415	109 4,084	4,017	163 3,952	181 3.883	187 3,811		33 1,650	75 1,651	90	95 1.645	101	1,631		
F Coleman-Subordination-Hords Creek Lake WMS Supply	Appendix4H	6 of 99		647	643	640	637	633	630		380	380	380	380	380	380		
F Coleman-Total WMS Supply	Appendix4H	6 of 99		4,854	4,836	4,798	4,752	4,697	4,628		2,063	2,106	2,117	2,120	2,120	2,118		
F Runnels C-O Subordination (Winters Lake) WM5 Supply	Appendix4H	20 of 99		114	89	69	49	31	0		23	0	0	0	0	0		
F Runnels C-O Subordination Ballinger Lake) WMS Supply F Eden - New Hickory Well (Replacement Well in DB12) WMS Supply	Appendix4H Appendix4H	20 of 99 26 of 99		23 392	0 392	392	0 392	392	392	-	114 322	89 322	69 322	49 322	31 322	322		
F Eden - New Reverse Osmosis (Advanced Treatment in DB12) WMS 5	Appendix4H	26 of 99		0	0	0	0	0	0		0	392	392	392	392	392		
F Eden - WMS Total	Appendix4H	26 of 99		392	392	392	392	392	392		322	714	714	714	714	714		
F Meneard-Alternative WMS-Aquifer Storage Recovery WMS Supply	Appendix4H	31 of 99		0	0			414	- 100	M .	240	240	500	500	100			
F Menard-Alternative WMS-Off Channel Reservoir not listed in IPP	Appendix4H	31 of 99		NA	NA .	NA	NA	NA	NA.		500	500	500	500	500	500		

REGION F	IPP doci							No	n-matching	numbers		=======================================				
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F Menard-Alternative WMS Total	Appendix4H	31 of 99		0	0	240	240	240	240		740	740	740	740	740	740
F Midland - Subordination-CMWD System WMS Supply	Appendix4H	32 of 99		4,488	6,055	0	0	0	0		4,505	6,055	0	0	0	- 0
F Midland - Subordination-OH Ivie LakeWMS Supply	Appendix4H	32 of 99		17	-97	-211	-324	-438	-553		17	-97	-211	-324	-438	-553
F Midland - WMS Totals	Appendix4H	32 of 99		5,849	13,963	31,839	31,726	31,608	31,499		5,849	14,060	32,050	32,050	32,046	32,052
F Millersview-Doole WSC-Subordination WMS Supply	Appendix4H	33 of 99		242	257	128	144				190	241	_ 3	46	0	0
F Millersview-Doole WSC- WMS Supply Total	Appendix4H	33 of 99		242	257	128	144				190	241	3	46		
F Odessa-New/Renew Water Supply WMS	Appendix4H	34 of 99			4,450	4,695	4,450	4,500	4,550			4,800	4,800	4,800	4,800	4,800
F Odessa-Subordination WMS Supply	Appendix4H	34 of 99		4,205	-						4,505			11000		
F Odessa - Reuse WMS - listed as alternative WMS in IPP.	Appendix4H	34 of 99		4,410	4,410	4,410	4,410	4,410	4,410		4,060	4,305	4,060	4,110	4,160	
F Odessa-WMS Supply Total	Appendix4H	34 of 99		4,756	11,437	6,318	13,316	14,430	16,163		5,056	15,847	16,728	17,726	18,840	20,573
F Richland SUD - Replacement Well WMS Supply	Appendix4H	36 of 99		0	0	0	0	0	0 :		113	113	113	113	113	113
F Richland SUD Total WMS Supply	Appendix4H	36 of 99		1	1	1	1	1	1		114	114	114	114	114	114
F Robert Lee-New WTP and Storage Facilities WMS Supply not listed i	Appendix4H	37 of 99		NA	NA	NA	NA	NA	NA		200	200	200	200	200	200
F Robert Lee Total WMS Supply	Appendix4H	37 of 99		111	155	46	66	80	103		311	355	246	266	280	303
F Robert Lee Alternative WMS-Develop Other Aguifer Supply not liste	Appendix4H	37 of 99		NA	NA	NA.	NA	NA	NA		150	150	150	150	150	150
F Robert Lee-Alternative WMS-New Reservoir Intake not listed in IPP	Appendix4H	37 of 99		NA	NA	NA	NA	NA	NA		50	50	50	50	50	50
F Robert Lee Total Alternative WMS Supply	Appendix4H	37 of 99			500	500	500	500	500		700	700	700	700	700	700
F San Angelo-Rehabilitation of Pipe WMS Supply	Appendix4H	38 of 99		0	0	2,247	2,233	2,220	2,206		2,308	2,295	2,281	2,267	2,254	2,240
F San Angelo-Subordination-OC Fisher Lake WMS Supply	Appendix4H	38 of 99		3,762	3,643	3,525	3,407	3,288	3,170		3,762	3,643	3,525	3,407	3,288	3,170
F San Angelo-Brush Control WMS Supply	Appendix4H	38 of 99		.0	0	0	0	0	0		8,362	8,362	8,362	8,362	8,362	8,362
F San Angelo WMS Supply Total	Appendix4H	38 of 99									20,586	27,686	30,718	37,870	37,462	36,994
F Snyder-Subordination WMS Supply	Appendix4H	39 of 99		511							513					
F Snyder WMS total Supply	Appendix4H	39 of 99		581							583					
r Irrigation-Andrews Co WMS Supply	Appendix4H	43 of 99	1	2,728							2,727					
F Manufacturing Ector Co. Subordination WMS Supply	Appendix4H	76 of 99		_,	149	3	46	86	158			449	108	396	386	408
F Manufacturing-Ector Co. WMS Supply total	Appendix4H	76 of 99			499	108	396	386	408			799	213	746	686	658
F Steam Electric-Mitchell Co-Alternative Generation Technology (Alter	Appendix4H	98 of 99	_	NA	NA.	NA.	NA	NA	NA		4,077	2,774	4,240	5,988	8,079	10,590



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August 28, 2010

Mr. John W. Grant, Chairman

Region F Regional Water Planning Group

Peter M. Holt

Commissioners

San Antonio

T. Dan Friedkin Vice-Chairman Houston

Mark E. Bivins Amarillo

J. Robert Brown El Paso

Ralph H. Duggins Fort Worth

Antonio Falcon, M.D. Rio Grande City

> Karen J. Hixon San Antonio

Margaret Martin Boerne

John D. Parker Lufkin

Lee M. Bass Chairman-Emeritus Fort Worth

Carter P. Smith **Executive Director**

c/o CRMWD P.O. Box 869 400 E. 24th St. Big Spring, Texas 79721

Re: 2010 Region F Initially Prepared Regional Water Plan

Dear Mr. Grant:

Thank you for seeking review and comment from the Texas Parks and Wildlife Department ("TPWD") on the 2010 Initially Prepared Regional Water Plan for Region F (IPP).

As you may know, the Texas Parks and Wildlife Commission recently issued a new and updated Land and Water Resources Conservation and Recreation Plan. One of the cornerstones of the Land and Water Plan calls for TPWD to promote and protect healthy aquatic ecosystems, including the establishment of cooperative strategies to incorporate long-term plant, fish and wildlife needs in all statewide, regional and local watershed planning, management and permitting processes.

TPWD understands that regional water planning groups are required by TAC §357.7(a)(8)(A) to perform quantitative reporting of environmental factors including effects on environmental water needs, wildlife habitat, cultural resources, and effects of upstream development on bays, estuaries and arms of the Gulf of Mexico when evaluating water management strategies. TPWD believes this quantification is a critical step in the process of attempting to plan for future water needs while at the same time, providing adequate protection of environmental resources, including fresh water inflows to current reservoirs and to the Gulf of Mexico. Accordingly, TPWD staff reviewed the IPP with a focus on the following questions:

- Does the IPP include a quantitative reporting of environmental factors including the effects on environmental water needs and habitat?
- Does the IPP include a description of natural resources and threats to natural resources due to water quantity or quality problems?
- Does the IPP discuss how these threats will be addressed?
- Does the IPP describe how it is consistent with long-term protection of natural resources?
- Does the IPP include water conservation as a water management strategy? Reuse?
- Does the IPP recommend any stream segments be nominated as ecologically unique?
- If the IPP includes strategies identified in the 2006 regional water plan, does it address concerns raised by TPWD in connection with the 2006 Water Plan.

Relative to the 2006 Regional Water Plan, the 2010 IPP proposes no changes to the population projections and includes only one change in water demands: a reduction for

Mr. John Grant Page 2 of 3 August 28, 2010

steam electric power in Mitchell County. With regard to existing supplies, groundwater supplies have changed only for the Trinity Aquifer in Brown County, for which a Desired Future Condition (DFC) and associated Managed Available Groundwater (MAG) value have been adopted by Groundwater Management Area 8 (GMA 8). Similarly, supplies from the Colorado River and associated reservoirs are unchanged from the 2006 Regional Water Plan. This includes subordination of certain water rights in the lower Colorado River basin to multiple reservoirs in Region F. As noted on page 4-20, the subordination of downstream water rights has the effect, on paper, of reducing intervening streamflows that may have environmental benefits.

Chapter 1 includes a description of natural resources in the region. Please update Table 1.4-1 Endangered and Threatened Species in Region F and Section 7.4 (Consistency with the Protection of Natural Resources) to include mussel species recently listed as threatened species by the TPWD Commission. These species include smooth pimpleback (*Quadrula houstonensis*), Texas fatmucket (*Lampsilis bracteata*), Texas pimpleback (*Quadrula petrina*), Texas fawnsfoot (*Truncilla cognate*), Texas hornshell (*Popenaias popeii*) and false spike (*Quadrula mitchelli*). More information can be found at http://www.tpwd.state.tx.us/landwater/land/maps/gis/ris/endangered_species/.

Section 5 describes the potential impact of water management strategies on water quality. Section 7.2 (Consistency with the Protection of Water Resources) reiterates information previously provided in Sections 1 and 4. Section 7.4 (Consistency with the Protection of Natural Resources) notes threatened and endangered species as well as public lands within Region F. Appendix 4F has low/medium/high descriptors of various environmental factors associated with water management strategies.

Each of the water management strategies discussed in Chapter 4 has a short description of associated environmental issues. Water conservation is recommended for many of the municipal water user groups with supply shortages as well as for irrigation shortages. Wastewater reuse is also recommended for some municipalities. TPWD supports the Region's consideration of brush control/management as an additional means to conserve water if done in a manner that can also benefit wildlife habitat. TPWD stands ready to assist with coordination of a land management program for Region F, as stated in the Region F IPP on page 4-202.

TPWD acknowledges Region F's environmental policy recommendations as discussed in Section 8.3.3. We concur with the Region's belief that good stewardship of land resources will also protect water resources and that water development must be balanced with protection of environmental values. While the IPP does not recommend nomination of any stream segments as ecologically unique until TPWD completes comprehensive studies, the IPP does acknowledge the importance of these resources. TPWD looks forward to future discussions with you regarding coordination of stakeholder-based efforts to identify and quantify priority environmental values to be protected.

Section 8.3.4 states that "Some cities and municipalities are concerned that a significant portion of their water supply could be reallocated to meet instream flow demands." TPWD is unaware of any federal or state legislation that forcibly reallocates existing water rights or water supplies to instream uses. Senate Bill 3, passed by the Texas

Mr. John Grant Page 3 of 3 August 28, 2010

legislature in 2007, created a new regulatory process for determining the environmental flow needs of the state's river basin and bay systems, but the law does not provide the state the authority to reallocate existing water rights to meet environmental flow needs. Texas Water Code Section 11.0237 does provide that water right holders may *voluntarily* amend an existing water right to change the use to or add a use for environmental flows. Additionally, Texas Water Code Section 11.122 provides that certain water right amendments, namely those that request an increased appropriation of water or an increased diversion rate, may be subject to environmental flow permit conditions.

We appreciate the opportunity to provide these comments. While TPWD values and appreciates the need to meet future water supply demands, we must do so in a thoughtful and sound manner that ensures the ecological health of our state's aquatic and natural resources. If you have any questions, or if we can be of any assistance, please feel to contact Cindy Loeffler at 512-389-8715. Thank you.

Sincerely

Ross Melinchuk

Deputy Executive Director, Natural Resources

RM:CL:ch

RESPONSE TO AGENCY COMMENTS

TWDB Comments on Initially Prepared 2011 Region F Regional Water Plan

Executive Summary

1. Page ES-8, Section ES.3.2, line 2: "...to develop approximately 243,000 acre-feet per year of additional supplies by 2060..." does not reconcile with total water management strategy supply volume of 254,754 acft/yr presented on page ES-9, Table ES-1 or total water management strategy volume of 194,710 acft/yr presented in Table 4.10-1. Please revise as appropriate.

Response: Table ES-1 and the corresponding text have been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups.

2. Page ES-8, Section ES.3.2, line 11; page ES-9, paragraph 1; and page ES-10 Figure ES-5: the total Region F water supply (current supplies with all water management strategies in year 2060) shown as 806,000 acft/yr does not reconcile with the sum of current water user group supply (610,000 acft/yr) and recommended water management strategy supply total (either 194,710 acft/yr, from Table 4.10-1; or 254,754 acft/yr, from Table ES-1), which would total either 804,710 acft/yr or 864,754 acft/yr, respectively. Please revise to reconcile these totals throughout the plan as appropriate.

Response: Page ES-8 has been updated to show 805,000 acre-feet. This corresponds to the supplies recommended for water user groups.

3. Page ES-9, Table ES-1: "Desalination" year 2060 water management strategy volume of 16,050 acft/yr and capital cost of \$424,148,000 do not reconcile with Table 4.10-1 summary of recommended water management strategies volume of 6,550 acft/yr and cost of \$6,717,000. Please revise as appropriate.

Response: Table ES-1 and the corresponding text have been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups.

4. Page ES-9, Table ES-1: "New Groundwater" 2060 water management strategy volume of 32,152 acft/yr and capital cost of \$126,333,990 does not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 26,152 acft/yr and cost of \$174,573,000. Please revise as appropriate.

Response: Table ES-1 and the corresponding text have been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups.

5. Page ES-9, Table ES-1: "Infrastructure Improvements" capital cost of \$24,776,979 does not reconcile with Table 4.10-1 summary of recommended water management strategy cost of \$6,091,979. Please revise as appropriate.

Response: Table ES-1 and the corresponding text have been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups.

6. Page ES-9, Table ES-1: "Reuse" capital cost of \$150,460,000 does not reconcile with Table 4.10-1 summary of recommended water management strategy cost of \$2,158,000. Please revise as appropriate, throughout plan (e.g. Figure ES-5).

Response: Table ES-1 has been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups. Figure ES-5 shows the distribution of supplies to water user groups, not costs.

7. Page ES-9, Table ES-1 & Figure ES-4: "Subordination" 2060 water management strategy volume of 72,830 acft/yr does not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 33,486 acft/yr. Please revise as appropriate, throughout plan (e.g. Figure ES-5).

Response: Table ES-1 has been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups. Figure ES-4 shows the total supply available to Region F with and without subordination. The difference in the bar graphs (green bar and red bar) is the amount of supply made available through subordination. No changes made to the graph. Figure ES-5 is correct.

8. Page ES-9, Table ES-1: "Voluntary Redistribution" 2060 water management strategy volume of 28,158 acft/yr and capital cost of \$8,964,000 does not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 22,958 acft/yr and cost of \$0. Please revise as appropriate, throughout plan (e.g. Figure ES-5).

Response: Table ES-1 and the corresponding text have been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups.

9. Page ES-9, Table ES-1: "Total" for All Recommended Water Management Strategies 2060 volume of 254,754 acft/yr and capital cost of \$827,377,639 do not reconcile with Table 4.10-1 summary of recommended water management strategy volume of 194,710 acft/yr and cost of \$282,234,649. Please revise as appropriate, throughout plan (e.g. Figure ES-5).

Response: Table ES-1 and the corresponding text have been updated. Table ES-1 includes strategies developed for water user groups and strategies developed for wholesale water providers. Table 4.10-1 lists only the strategies for water user groups. Figure ES-5 shows only supplies to water user groups. This figure is correct.

Chapter 1

10. Please describe how the planning group explored opportunities and benefits of regional water supply facilities or providing regional management of regional facilities. [Title 31 Texas Administrative Code (TAC) §357.5(e)(6)]

Response: The region evaluated regional opportunities through the special studies that were conducted in Phase 1 of this planning cycle. These studies evaluated regional opportunities for groundwater supplies and rural systems. Both of these special studies are discussed in Section 1.7 of the plan. The findings of the special studies were considered in the development of water management strategies.

Chapter 3

11. Please indicate whether any publicly available plans of major agricultural, municipal, manufacturing and commercial water users and any water management plans were considered. [31 TAC $\S357.5(k)(1)(E)$ $\S357.5(k)(1)(F)$]

Response: Available water supply plans are discussed in Section 1.6.

12. Page 3-4: Two of the groundwater sources listed in Table 3.1-1 and Appendix 3A appear to be the same, but are reference by different names, specifically Table 3.1-1 source "Pecos Valley" and Appendix 3A source "Cenozoic Pecos Alluvium". Please revise as appropriate.

Response: Appendix 3A was corrected to show the aquifer name as Pecos Valley.

13. Page 3-39: Hords Creek Lake "...diversion of 2,260 acre-feet per year" does not reconcile with page 3-35, Table 3.2-1 diversion volume of 2,240 acft/yr. Please revise as appropriate throughout plan.

Response: The diversion amount was corrected to 2,240 acre-feet per year.

14. Page 3-42, Table 3.2-2: Table does not indicate to which information the footnote (c) applies. Please revise as appropriate.

Response: The footnote was removed.

15. Page 3-43, Table 3.2-3: Table header does not specify whether the "WAM Supplies" listed are 'firm yield' or 'safe yield'. Please clarify in table.

Response: All run-of-the-river supplies are based on firm supply. The header was changed to say "WAM Firm Supplies".

16. Page 3-53, Table 3.5-1: CRMWD Ector County Well Field volume of 423 acft/yr for all decades does not reconcile with Appendix 3B volume of 440 acft/yr for all decades. Please revise as appropriate.

Response: The supply volume has been changed to 440 acre-feet per year for all decades.

Chapter 4

17. It appears that total county 'balance' surpluses/shortages were calculated incorrectly throughout Chapter 4 tables by subtracting 'Total Demand' from 'Total Supply'. Please clarify that these are not water 'needs' (e.g. with a footnote) or revise to reflect total subcategory and county-wide water needs as the sum of the individual needs of each water user group in the county; needs that are calculated based on each water user group's own demands and supplies. [31 TAC §357.7(a)(4)(B)]

Response: The calculations presented in Tables 4.1-1 through 4.1-3 are correct. A footnote will be added that states the sum of the individual water user group needs will differ. A comparison of supply and demand by water user group is included in Appendix 4A.

18. Page 4-2, last sentence: Indication that "On a water user group basis, the sum of the shortages is *over* 213,000 acre-feet per year in 2010..." does not reconcile with Table 4.1-1 year 2010 summation of shortages of 212,918acft/yr. Please revise as appropriate throughout plan.

Response: The text on page 4-2 was changed to say "about 213,000".

19. Page 4-6, Table 4.1-1: Table incorrectly sums water 'needs' both horizontally (e.g. the Andrews County irrigation need of 12,875 acft/yr is apparently reduced to 12,818 acft/yr by incorrectly associating surplus water supplies from other water user groups that are not available to this water user group) and vertically (e.g. total needs for the region are presented as 183,933 acft/yr in 2010 whereas the correct net region total water needs in 2010 are 212,918 acft/yr). Please revise table to summarize and compile identified water needs appropriately.

Response: The calculations presented in Tables 4.1-1 through 4.1-3 are correct. A footnote will be added that states the sum of the individual water user group needs will differ. A comparison of supply and demand by water user group is included in Appendix 4A.

20. Page 4-19, Table 4.2-3: Subordination water management strategy supply volume totals, by decade, in acft/yr of 43,303; 46,471; 29,394; 30,636; 30,877; 32,946) do not reconcile with

Table 4.10-1 Subordination supply volume totals, by decade, in acft/yr of 43,890; 47,047; 29,961; 31,194; 31,427; 33,486. Please revise as appropriate.

Response: Tables 4.2-3 and 4.10-1 were updated for the final plan. The total amount for subordination shown in Table 4.2-3 will not be the same as in Table 4.10-1 because the amount of water attributed to subordination of Spence Reservoir is shown as an infrastructure improvement strategy for San Angelo in Table 4.10-1. This strategy includes the subordination amount plus the existing available supply of 34 acre-feet per year from Spence Reservoir.

- 21. Page 4-20, paragraph 1, line 6: All recommended water management strategies must indicate associated capital and annual costs. Please indicate whether the cost for the 'Subordination' water management strategy is zero or present any associated costs with the strategy.
 - Response: The text on page 4-20 of the IPP states, "For planning purposes, capital and annual costs for the subordination strategy are assumed to be \$0." This statement is now on page 4-21 of the final plan.
- 22. Page 4-26, first sentence, last paragraph: Please reword text to clarify that implementation of Region F water municipal conservation provides water savings of 310 acft/yr rather than 509 acft/yr. This reconciles the strategy supply with the Appendix 4G, page 4G-1 value of 310 acft/yr for 2060 and reflects the fact that the remaining conservation savings appear to be associated with plumbing fixture savings that were embedded in the demand projections.

Response: The text was reworded to reflect the savings associated only with Region F strategies.

23. Page 4-28, Section 4.3.2, paragraph 1: 2010 and 2060 City of Ballinger water demands of 1,068 acft/yr and 1,337 acft/yr do not reconcile with Table 4.3.2 (page 4-29) values of 1,142 acft/yr and 1,329 acft/yr respectively. Please revise as appropriate.

Response: The text was corrected to reflect the amounts shown in Table 4.3-2.

24. Page 4-28, Section 4.3.2, paragraph 2: 2010 City of Ballinger water management strategy supply of 950 acft/yr does not reconcile with Table 4.3.2, page 4-29 value of 940 acft/yr and neither number reconciles with Appendix 4H, page 4H-3 tabular value of 917 acft/yr.

Response: Lake Ballinger yield of 950 ac-ft is for 2000 sediment conditions. The yield of 940 acre-feet per year is in 2010. The text on page 4-29 of the final plan was modified to clarify this. The supply difference in Appendix 4H is due to sales to county-other.

25. Page 4-29, Table 4.3-3: Table 'Comments' does not specify whether the "WAM yield" values listed are 'firm yield' or 'safe yield'. Please clarify.

Response: The comments were clarified to reflect safe yield.

26. Page 4-31: Section 'Voluntary Redistribution – Hords Creek Reservoir to Ballinger (220 acft/yr for 2040 through 2060) and MDWSC to Ballinger (600 acft/yr for 2010 through 2040)' water management strategies do not appear to be included in the Summary of Recommended water management strategies (supply and cost data) in Appendix 4H under the category 'Voluntary Redistribution' located on the fourth (unnumbered) page of Appendix 4H. Please revise as appropriate.

Response: Neither of these strategies is recommended for the City of Ballinger. Ballinger has an existing contract for 600 acre-feet per year of water from CRMWD through MDWSC. Only a portion of the water is available without subordination. The recommended strategies for Ballinger are conservation, subordination of Lake Ballinger, subordination of CRMWD sources (for the remainder of the MDWSC contract) and enter into a new contract with CRMWD when the contract with MDWSC expires.

Appendices

27. Appendix 4D, page 48: It appears that the final water management strategy in Appendix D is not assigned to any particular water user group or wholesale water provider. Please clarify.

Response: this is a generic cost estimate that is used for planning purposes only.

28. Appendices 4H/4I: Appendix 4H is labeled "Water User Group Summary Tables" but appears to include four tables including a Summary of Recommended Strategies, Summary of Alternative Strategies, List of Potentially Feasible Strategies, and Water User Group Summary Tables. Table of Contents refers to appendix 4I which is not labeled in the appendices section the contents of which appear to be included at the beginning of Appendix 4H. Please revise Table of Contents and appendices labels regarding 4H and 4I to clarify locations of contents.

Response: This was corrected for the final plan.

29. (Attachment B) Comments on the online planning database (i.e. DB12) are herein being provided in spreadsheet format. These Level 1 comments are based on a direct comparison of the online planning database against the Initially Prepared Regional Water Plan document as submitted. The table only includes numbers that do not reconcile between the plan (left side of spreadsheet) and online database (right side of spreadsheet). An electronic version of this spreadsheet will be provided upon request.

Response: The database (DB12) and the Region F Water Plan have been reviewed for consistency and data entries have been reconciled. In some cases, both the plan and DB12 were modified to clarify water strategies and/or supply distributions. A summary of the responses to these comments is included in the Table 10B-1.

LEVEL 2. Comments and suggestions that might be considered to clarify or enhance the plan.

General Comment

1. Header on each page indicating "IPP Volume I" suggests that there may be another volume associated with plan. Please consider clarifying in header and/or Table of Contents and throughout plan (e.g. pages 1-64, 3-44, 4-24), if appropriate in the final adopted plan.

Response: Volume I was removed from the header. Region F will provide a complete set of the Phase I studies to the Regional Planning Group Members. This will be printed as a separate document.

Chapter 4

2. Chapter 4: There is no reference in the Chapter 4 text to the associated Appendix 4F – Strategy Evaluation Matrix and Quantified Environmental Impact Matrix. Please consider including a reference in Chapter 4 directing readers to this data.

Response: A reference was added to page 4-12 of the final plan.

Texas Parks and Wildlife Comments, Received August 28, 2010

1. Please update Table 1.4-1 Endangered and Threatened Species in Region F and Section 7.4 with the recently designated threatened mussel species. (Note: these were designated in November 2009.)

Response: Table 1.4-1 was updated with the recently threatened mussel species. In Chapter 7, the six listed mussel species were added to the text on page 7-5.

2. Texas Parks and Wildlife supports brush control/land management to conserve water if done in a manner that can also benefit wildlife habitat.

Response: Region F acknowledges your support for brush control and land management.

3. Texas Parks and Wildlife looks forward to working with the region to identify priority environmental values to be protected, including designation of unique stream segments.

Response: Region F appreciates the TPWD's offer of assistance.

4. Texas Parks and Wildlife discussed clarifications of instream flows as outlined by SB3.

Response: Region F acknowledges your comments. No changes were made to the plan.

	refere	ence:			IPP docu	ıment nun	nber				Online F	Planning I	Database	(DB12) nur	mber		
										non-							
44	Dago	Table	non-decadal							decadal							Despense
gion	Page																Response
ຼື Item	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060	
F Colorado River Municipal Water District Total Demands	2-28	2.4-1		90,712	93,131	75,243	75,629	75,199	76,144		89,212	91,631	73,743	74,129	73,699	74,644	Table 2.4-1 was corrected.
F Brown County Water Improvement District #1 Total Dema	2-29	2.4-2		14,929	15,053	15,036	14,949	14,941	15,007		15,085	15,210	15,192	15,105	15,097	15,163	Table 2.4-2 was corrected.
F City of San Angelo Total Demands	2-31	2.4-6					52,634	53,196	53,746					52,586	52,953	53,265	Table 2.4-6 was corrected.
																	Plan and DB12 are correct; Value stated in comment is allocated supply to
F Andrews Co. Pecos Valley Rio Grande	3-4	3.1-1	1,189								191	191	191	192	192	192	WUGs.
																	Plan and DB12 are correct; Value stated in comment is allocated supply to
F Andrews Co. Dockum Colorado	3-4	3.1-1	905								22	22	22	22	22	22	WUGs.
																	Plan and DB12 are correct; Value stated in comment is allocated supply to
F Andrews Co. Dockum Rio Grande	3-4	3.1-1	5,792								NA	NA	NA	NA	NA	NA	WUGs.
	2.4	244	24 270								24.005	24.006	24.006	25.272	25.262	25.250	DB12 value is 31279; Value stated in comment is allocated supply to
F Andrews Co. Ogallala Colorado	3-4	3.1-1	31,279								24,886	24,886	24,886	25,373	25,363	25,350	WUGs.
F Andrews Co. Ogallala Rio Grande	3-4	3.1-1	4,333								NA	NA	NA	NA	NA	NA	DB12 value is 4333; Value stated in comment is allocated supply to WUGs.
F Andrews Co. Ogandia No Grande	3-4	3.1-1	4,333								IVA	INA	INA	INA	INA	INA	
F Andrews Co. Eds-Trinity Colorado	3-4	3.1-1	4,640								25	25	25	25	25	25	DB12 value is 4640; Value stated in comment is allocated supply to WUGs.
F Groundwater Supply -Brown-Trinity Aquifer	3-4	3.1-1	2,045							2,085	25	23	23	23	25	23	Changed db12 and table 3.1-1
F Groundwater Supply -Coleman-Ellenberger-San Saba	3-4	3.1-1	2,043							179							deleted in DB12
F Groundwater Supply -Crane-Other Aquifer	3-4	3.1-1	NA							81							Add table of Other aquifer
F Ector-Pecos Valley	3-4	3.1-1	2,904							3,143							Changed DB12
F Irion - Dockum	3-4	3.1-1	-							928							This is other aquifer in DB12, not Dockum
F Mitchell-Other Aquifer	3-4	3.1-1	NA							2							Add table of Other aquifer
F Pecos-Capitan Reef	3-4	3.1-1	34,000							NA							Added to DB12
F Pecos-Rustler Aquifer (db12)	3-4	3.1-1	NA							1,389							Add table of Other aquifer
F Pecos Other Aquifer (db12)	3-4	3.1-1	NA							5							Add table of Other aquifer
F Reeves-Rustler Aquifer (db12)	3-4	3.1-1	NA							103							Add table of Other aquifer
F Runnels- db12 Other Aquifer	3-4	3.1-1	NA							2,656							Add table of Other aquifer
F Scurry-db12 -Other Aquifer	3-4	3.1-1	NA							314							Add table of Other aquifer
F Sterling-Other Aquifer (db12)	3-4	3.1-1	NA							997							Add table of Other aquifer
F Winkler- Dockum Aquifer	3-4	3.1-1	10,746							10,748							Added supply from Colorado Basin to Table
																	Total groundwater supplies include other aquifer. Plan and DB12 are now
F Groundwater Supplies in Region F	3-6	3.1-1		NA	NA To a	NA TOT	NA	NA	1,170,823		1,157,501	1,157,508	1,157,504	1,157,491	1,157,468	1,157,453	
F Currently Available Supplies to WUGs/Co- Brown	3-51	3.4-1		21,694	21,784	21,787	21,752	21,764	21,821		21,750	21,840		21,808	21,820		changed in plan
F Coke	3-51	3.4-1		2,094	2,072	2,345	2,307	2,288	2,253		2,228	2,181	2,446	2,401	2,372		7 changed in plan
F Coleman F Concho	3-51 3-51	3.4-1 3.4-1		2,906 7,001	2,891 6,994	2,888 7,032	2,886 7,021	2,885 6,909	2,881 6,909		2,806 7,035	2,791 7,172		2,786 7,185	2,785 7,129		changed in plan
F Ector	3-51	3.4-1		48,121	44,770	53,358	54,244	55,272	55,908		48,048	44,677		54,079	55,110		changed in plan
F McCulloch	3-51	3.4-1		9,644	9,737	9,889	9,941	9,790	9,889		9,449	9,530		9,708	9,665		changed in plan
F Runnels	3-51	3.4-1		4,854	4,859	4,899	4,899	4,825	4,556		4,953	4,948		5,090	4,701		2 changed in plan
F Tom Green	3-51	3.4-1		74,516	74,295	74,186	73,972	4,023	4,550		74,429	74,207	74,041	73,822	4,701	7,732	changed in plan
F Total Supply to Water Users	3-51	3.4-1		619,575	615,264	615,446	611,147	610,509	609,822		619,443	615,208	615,315	611,004	610,358	609.670	changed in plan
F Andrews Co. Direct Reuse	NA	NA		NA	NA	NA NA	NA NA	NA	NA		560	560	560	560	560		add table 3.3-3 to plan
F Concho Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		80	220	220	220	220		add table 3.3-3 to plan
F Ector Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		3,000	3,150	3,300	3,450	3,600		add table 3.3-3 to plan
F Midland Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		5,987	5,987	5,987	5,987	5,987	5,987	add table 3.3-3 to plan
F Runnels Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		218	218	218	218	218		add table 3.3-3 to plan
F Tom Green Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		8,500	8,500	8,500	8,500	8,500	8,500	add table 3.3-3 to plan
F Ward Co. Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		670	670	670	670	670	670	add table 3.3-3 to plan
F Total Direct Reuse	NA	NA		NA	NA	NA	NA	NA	NA		19,015	19,305	19,455	19,605	19,755	19,905	add table 3.3-3 to plan
F Currently Available Supply - WWP- Brown Co WID #1	3-53	3.5-1		29,712	29,712	29,712	29,712	29,712	29,712		29,868	29,868		29,868	29,868		DB12 reports total supply as 29712. No changes made.
F ""-CRMWD-Ector Co Well Field	3-53	3.5-1		423	423	423	423	423	423		440	440	440	440	440	440	DB12 is correct. Corrected table 3.5-1
																	DB12 reports source as CRMWD system (includes Ivie, Thomas and
F ""CRMWD-Lake Ivie	3-53	3.5-1		66,350	65,000	636,520	63,000	60,950	59,600		66,874	65,524		62,676	61,336		Spence less non-system portion)
F ""EV Spense	3-53	3.5-1		560	560	560	560	560	560		34	34	34	34	34		Spence non-system portion is reported in DB12
F ""City of Odessa- Ward Co Field	3-53	3.5-1		4,800	NA	NA	NA	NA	NA		4,800	-	-	-	-		Correct
F "" City of Odessa-CRMWD System	3-53	3.5-1		13,439	13,191	20,793	20,778	21,177	21,047		14,139	13,691	21,388	20,978	21,277		7 DB12 matches table. No changes made.
F ""-University Lands- Midland Paul Davis Well Field	3-53	3.5-1		4,722	4,722	4,722	-	-	-		NA 4.000	NA 1.045	NA 1.067	NA	NA	NA	DB12 is correct. Data are presented differently in Table 3-5.2.
F "" University Lands- City of Andrews Well Field	3-53	3.5-1		(12.818)	708	730	-	-	-		1,908	1,945	1,967	0	U	(DB12 is correct. Data are presented differently in Table 3-5.2.
F Andrews County Total Needs	4-6	4.1-1	 	(12,818)							(12,875)						-
F Borden County Total Needs	4-6 4-6	4.1-1		(1,520) (2,369)							(1,847)			-			Not a valid comparison. Table 4.1-1 compares total supplies versus
F Brown County Total Needs F Coke County Municipal Needs	4-6 4-6	4.1-1 4.1-1		(2,369)							(116)				+		demands. It does not report only the needs.
F Coke County Municipal Needs F Coke County Total Needs	4-6 4-6	4.1-1		(870)							(875)						demands. It does not report only the needs.
F Coleman County Municipal Needs	4-6	4.1-1		(359)							(1,304)						
i Coleman County Municipal Needs	+-0	7.1-1		(333)							(1,304)		<u> </u>				

1

REGION F		Non-matching i	numbers
	IPP document		
	reference:	IPP document number	Online Planning Database (DB12) number
			won

	refere	nce:		IPP documen	t number	•			Online P	lanning I	Database	(DB12) nı	umber		
Item	Page number	Table number	non-decadal number 2010	2020 20	30 20	40 2050	2060	non- decadal number	2010	2020	2030	2040	2050	2060	Response
F Coleman County Total Needs	4-6	4.1-1	(1,730)					(2,675)						
F Concho County Municipal Needs	4-6	4.1-1	122	·					(4)						
F Concho County Total Needs	4-6	4.1-1	1,090						(4)						
F Ector County Total Needs	4-6	4.1-1	(5,508	·					(5,694)						
F Howard County Municipal Needs	4-6	4.1-1	(1,350						(1,394)						
F Howard County Total Needs F Irion County Total Needs	4-6 4-6	4.1-1	(1,864						(1,971) (1,302)						
F Kimble County Total Needs	4-6 4-6	4.1-1 4.1-1	(82)						(1,302)						
F Martin County Total Needs	4-6	4.1-1	(1,149						(1,180)						
F McCulloch County Municipal Needs	4-6	4.1-1	(93:	·					(1,004)						
F McCulloch County Total Needs	4-6	4.1-1	2,348	 					(1,004)						Not a valid comparison. Table 4.1-1 compares total supplies versus
F Mitchell County Total Needs	4-6	4.1-1	(4,942	<u>' </u>					(5,023)						demands. It does not report only the needs.
F Reagan County Total Needs	4-6	4.1-1	(10,990	'					(10,997)						, , , , , , , , , , , , , , , , , , , ,
F Reeves County Total Needs F Scurry County Total Needs	4-6 4-6	4.1-1 4.1-1	(36,089	·					(36,097) (565)						
F Tom Green County Municipal Needs	4-6	4.1-1	(8,724						(9,225)						
F Tom Green County Total Needs	4-6	4.1-1	(58,500	·					(59,084)						
F Upton County Irrigation Needs	4-6	4.1-1	(10,640)					(10,672)						
F Upton County Total Needs	4-6	4.1-1	(10,032)					(10,672)						
F Region F Total Irrigation Needs	4-6	4.1-1	(163,800						(179,728)						
F Region F Total Mining Needs	4-6	4.1-1	2,10						(503)						
F Region F Total Municipal Needs F Region F Total Steam Electric Needs	4-6 4-6	4.1-1 4.1-1	(12,16)	<u>' </u>					(22,055) (7,095)						
F Region F Total Needs	4-6	4.1-1	(183,933)					(212,918)						
F Andrews County Total Needs	4-7	4.1-2	(105,55.	(1	.2,652)				(212,310)		(12,707)				
F Borden County Total Needs	4-7	4.1-2			[1,462]						(1,839)				
F Brown County Total Needs	4-7	4.1-2			(2,330)						(2,946)				
F Coke County Municipal Needs	4-7	4.1-2			(23)						(28)				
F Coke County Total Needs	4-7	4.1-2			(675)						(680)				
F Coleman County Municipal Needs F Coleman County Total Needs	4-7 4-7	4.1-2 4.1-2			(317) (1,689)				-		(1,270) (2,642)				
F Ector County Total Needs	4-7	4.1-2		 	(9,473)						(9,640)				
F Howard County Municipal Needs	4-7	4.1-2			36						(25)				
F Howard County Total Needs	4-7	4.1-2			210						(34)				
F Irion County Total Needs	4-7	4.1-2			[1,166]						(1,181)				
F Kimble County Total Needs	4-7	4.1-2			(852)						(1,749)				
F Martin County Total Needs	4-7	4.1-2			(680)						(751)				
F McCulloch County Municipal Needs F McCulloch County Total Needs	4-7 4-7	4.1-2 4.1-2			(887) 2,462						(990) (990)				
F Mitchell County Total Needs	4-7	4.1-2		 	4,469)						(4,670)				Not a valid comparison. Table 4.1-2 compares total supplies versus
F Reagan County Total Needs	4-7	4.1-2			.0,109)						(10,116)				demands. It does not report only the needs.
F Reeves County Total Needs	4-7	4.1-2			34,371)						(34,387)				
F Runnels County Municipal Needs	4-7	4.1-2			(1,620)						(1,630)				
F Runnels County Total Needs	4-7	4.1-2			(3,021)						(3,031)				
F Scurry County Total Needs	4-7	4.1-2			1,304						(10)				
F Tom Green County Municipal Needs F Tom Green County Total Needs	4-7 4-7	4.1-2 4.1-2			0,266)				-		(10,564) (60,786)				
F Upton County Irrigation Needs	4-7	4.1-2			.0,186)						(10,223)				
F Upton County Total Needs	4-7	4.1-2			(9,659)						(10,223)				
F Region F Total Irrigation Needs	4-7	4.1-2			55,380)						(174,774)				
F Region F Total Manufacturing Needs	4-7	4.1-2			(3,735)						(3,747)				
F Region F Total Mining Needs	4-7	4.1-2			2,371						(29)				
F Region F Total Municipal Needs	4-7	4.1-2		<u> </u>	(6,835)						(36,117)				
F Region F Total Steam Electric Needs F Region F Total Needs	4-7 4-7	4.1-2 4.1-2			.0,787) (4,340)				-		(11,380) (226,047)				
F Andrews County Total Needs	4-7	4.1-2		(19	7,340)		(11,666)				(220,047)			(11,719)	
F Borden County Total Needs	4-8	4.1-3					(1,373)		+					(1,826)	
F Brown County Total Needs	4-8	4.1-3					(2,163)							(2,841)	Net cultide committee Table 44.0
F Coleman County Municipal Needs	4-8	4.1-3					(276)							(1,241)	Not a valid comparison. Table 4.1-3 compares total supplies versus demands. It does not report only the needs.
F Coleman County Total Needs	4-8	4.1-3					(1,648)							(2,613)	demands. It does not report only the needs.
F Ector County Total Needs	4-8	4.1-3					(19,865)							(20,012)	
F Howard County Municipal Needs	4-8	4.1-3					(720)							(825)	

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<u>a</u>										non-							
l no	Page	Table	non-decadal							decadal							Response
ltem	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060	
F Howard County Total Needs	4-8	4.1-3							(890)							(1,330)	
F Irion County Total Needs	4-8	4.1-3							(963)							(1,000)	
F Kimble County Municipal Needs	4-8	4.1-3							(904)							(910)	
F Kimble County Total Needs F Martin County Total Needs	4-8 4-8	4.1-3 4.1-3					+		(895) (291)							(1,909)	
F McCulloch County Municipal Needs	4-8	4.1-3					1		(960)							(1,038)	
F McCulloch County Total Needs	4-8	4.1-3					1		2,494							(1,038)	
F Mitchell County Total Needs	4-8	4.1-3							(3,707)							(4,140)	
F Reagan County Total Needs	4-8	4.1-3							(8,386)							(8,393)	Not a valid comparison. Table 4.1-3 compares total supplies versus
F Reeves County Total Needs	4-8	4.1-3							(31,829)							(31,847)	
F Scurry County Total Needs	4-8	4.1-3							951							(348)	
F Tom Green County Municipal Needs	4-8	4.1-3					 		(11,321)							(11,633)	
F Tom Green County Total Needs F Upton County Irrigation Needs	4-8 4-8	4.1-3 4.1-3					+		(62,004) (9,495)							(62,367) (9,539)	4
F Upton County Total Needs	4-8	4.1-3							(9,030)							(9,539)	
F Region F Total Irrigation Needs	4-8	4.1-3							(141,535)							(166,120)	
F Region F Total Mining Needs	4-8	4.1-3							1,875							(375)	
F Region F Total Municipal Needs	4-8	4.1-3							(39,963)							(49,636)	
F Region F Total Needs	4-8	4.1-3							(205,321)							(241,856)	
F Colorado River Municipal Water District Needs	4-9	4.1-4		(16,227)	(25,196)	(8,658)	(10,394)	(11,314)	(13,609)		(14,729)	(23,698)	(8,138)	(9,242)	(9,954)	(12,229)	Corrected Table 4.1-4
F City of Odessa Needs	4-9	4.1-4		(4,488)	(10,176)	(4,118)	(5,215)	(6,085)	(24.746)		(3,788)	(10,216)	(3,523)	(5,015)	(5,985)	(24.205)	Corrected Table 4.1-4
F City of San Angelo Needs F Colorado River Municipal Water District Needs	4-9 NA	4.1-4 Appendix 3B		(16,227)	(25,196)	(8,658)	(33,188)	(33,973) (11,314)	(34,746)		(14,729)	(23,698)	(8,138)	(33,140) (9,242)	(33,730) (9,954)		Corrected Table 4.1-4 Corrected Appendix 3B
F City of Odessa Needs	NA NA	Appendix 3B		(4,488)	(10,176)	(4,118)	(5,215)	(6,085)	(13,009)		(3,788)	(10,216)	(3,523)	(5,015)	(5,985)	(12,229)	Corrected Appendix 3B
F Subordination -Coleman - Coleman Co - Lake Coleman	4-18	4.2-3		2,063	2,075	2,080	2,087	2,089	2,091		1,650	1,651	1,647	1,645	1,639	1,631	Corrected table 4.2-3
F Subordination -Manufacturing-Ector Co - CRMWD	4-18	4.2-3		66	149	3	46	86	158		366	449	108	396	386	408	Corrected table 4.2-3
F Subordination -Manufacturing-Kimble Co - Llano River no	4-18	4.2-3		NA	NA	NA	NA	NA	NA		1,000	1,000	1,000	1,000	1,000	1,000	Corrected table 4.2-3
F Subordination - Miles - Runnels Co - OC Fisher Reservoir	4-19	4.2-3		100	100	100	100	100	100		140	153	163	173	183	193	Corrected table 4.2-3
F Subordination -Snyder - Scurry Co - CRMWD	4-19	4.2-3		511							513						Corrected table 4.2-3
F Subordination -Total	4-19	4.2-3		43,303	46,471	29,394	30,636	30,877	32,946		43,889	47,044	29,902	31,374	31,810	33,829	Corrected table 4.2-3
		43-3 , 4.3-4															DB12 and tables are correct. Subordination values in DB12 also include
F Ballinger - Subordination-Ballinger	4-29 , 4-30 & 4-41 4-41	1 & 4.3-8 4.3-8		940 343	356	227	243	0	0		917 NA	NA	NA	NA	NA	NA	supply to Runnels County-other.
F Ballinger - Subordination of downstream rights to CRMW	4-41	4.3-8		343	330	221	243	U	U		INA	INA	INA	INA	INA	INA	Corrected DB12 to show subordination to Ballinger and customers Included in DB12 as O.H. Ivie non-system portion. Changed table 4.3-8 to
F Ballinger - CRMWD System not listed in DB12	4-41	4.3-8		257	244	373	357	0	0		NA	NA	NA	NA	NA	NA	clarify.
								-	-								Includes subordination supplies to customers. Customers supplies are
F Winters - Subordination	4-43	4.3-11		720					670		552					591	shown spearately in DB12.
F Reuse Cost	4-48	4.3-14							258,000							69,960	Corrected Table 4.3-15.
																	DB12 breaks out sales to county other and manufacturing. The sum of
5 6 1 15 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4.40	4244		720	710	700	600	600	670		550	5.54	566	574	575	504	subordination supplies from Lake Winters is correct. No changes made.
F Subordination to Lake Winters	4-48	4.3-14		720	710	700	690	680	670		552	561	566	571	575	591	DB12 breaks out sales to county other and manufacturing. The sum is
F Winters WMS Totals	4-48	4.3-14		720	710	700	800	790	780		552	561	566	681	685	701	correct. No changes made.
F City of Winters Cost for Reuse	4-48	4.3-15		720	710	700	500	750	258,000		332	301	300	001	003		Corrected Table 4.3-15.
F Bronte - Rehabilitation of Pipeline	4-52	4.3-18		0	0	0	0	0	0		129	129	129	129	129		DB12 includes subordination supplies in quantity.
F City of Bronte Cost for Rehab of Oak Creek pipeline	4-56	4.3-21	1,238,600	21,600	21,600					1,955,000	-	-					Revised per comment form Bronte.
F Robert Lee -Direct Reuse WMS	4-60	4.3-23	2,158,000							na							Not a recommneded or alternate strategy. Not included in DB12.
F Robert Lee - Brush Control Cost - not listed in IPP	4-68	4.3-30		NA	NA	NA	NA	NA	NA	114,070	19,000	19,000	19,000	19,000	19,000	,	deleted in DB12
F City of Menard Conservation Cost	4-71	4.3-32	24 520 000	8,755	13,526	13,146	12,776	12,414	12,190	25 272 000	2,183	7,018	6,993	6,982	6,961	6,951	Corrected DB12.
F City of Menard Off Channel Reservoir F City of Menard Conservation Cost	4-77 4-79	4.3-35 4.3-36	24,520,000	8,755	13,526	13,146	12,776	12,414	12,190	25,273,000	2,183	7,018	6,993	6,982	6,961	6 OE1	Corrected table in plan. Corrected DB12.
F City of Midland Develop Aquifer Supplies	4-79	4.3-39	468,507,000	6,733	13,320	13,140	12,770	12,414	12,190	168,507,000	2,103	7,016	0,333	0,982	0,901	0,931	Corrected bb12. Corrected table in plan.
F City of Midland Develop Aquifer Supplies	4-82	4.3-39	400,307,000				 	4,648,500	4,648,500	100,507,000					4,651,200	4.651.200	Corrected DB12.
F Midland-Subordination-WMS Supply	4-87	4.3-41		4,656	6,113	-156	-266	-378	-490		4,505	6,055	0	0	0	0	Reconciled
F Midland-Voluntary Redistribution-Annual Cost	4-88	4.3-42				4,790,000	4,694,200	4,598,400	4,502,600				4,772,088	4,676,646	4,581,204	4,485,763	Reconciled
F Midland-Annual Cost Totals	4-88	4.3-42				24,646,531	24,570,877	9,738,961	9,635,997				24,628,619	24,523,323	9,724,465	<u> </u>	Reconciled
F City of Midland Redistribution	4-88	4.3-42			2.22-	4,790,000	4,694,200	4,598,400	4,502,600				-	-	-		corrected DB12
F Coleman-Subordination WMS Supply	4-93	4.3-46		2,200	2,200	2,200	2,200	2,200	2,200		2,030	2,031	2,027	2,025	2,019	2,011	Includes sales to County-other. Corrected Appendix H
F Brady-Subordination WMS Supply	4-98	4.3-52		1,350	1,350	1,350	1,350	1,350	1,350		2,170	2,170	2,170	2,170	2,170	2,170	The number in the plan is limited by water treatment and delivery capacity. The number in DB12 is not.
F City of Eden Cost for replacent wells	4-106	4.3-55	1,800,000	1,550	1,550	1,550	1,550	1,550	1,550	1,367,372	2,170	2,110	2,170	2,110	2,110	2,170	corrected DB12
F City of Eden Cost for Advanced Treatment	4-109	4.3-57	2,582,000							4,382,000							corrected DB12
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	refere	ence:			IPP docu	ument nur	nber				Online	Planning	Database	(DB12) nu	mber		
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991	Dage	Table	non-decadal							decadal							Despense
gion	Page																Response
ੂੰ ltem	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060	
F City of Eden- Cost of Recommended Strategies for Hickory	4-121	4.3-65	1,367,372							na							Don't understand comment.
F Richland SUD-Cost of Recommended Strategies for Hickor	4-121	4.3-65	977,829	308,311	308,311	384,361	384,361	384,361	384,361	1,703,979.00	234,154.37	· · ·	· · ·	 	86,154.37	86,154.3	Corrected table in plan.
F City of Melvin -Cost of Recommended Strategies for Hickd F Live Oak Hills Subdivision -Cost of Recommended Strategi	4-121 4-121	4.3-65 4.3-65	325,139 88,804	102,392 288,819	102,392 288,819	102,392 288,819	102,392 288,819	102,392 288,819	102,392 288,819	na	na	na na	na na	1	na	na na	Corrected table in plan.
F Kimble Co Manufacturing Cost not listed in IPP	4-121	4.3-05	88,804	288,819 NA	NA	288,819 NA	NA	NA	288,819 NA	0	na 0	0	0	0	na O	О	Corrected table in plan. There are no costs associated with subordination.
F Iron Co Irrigation Conservation WMS Supply	4-144	4.6-5		INA	36	IVA	INA	INA	INA	0	0	37	0	0	U	0	Corrected table in plan.
F Scurry Co Irrigation Conservation WMS Supply	4-144	4.6-5			572							571					Corrected table in plan.
F Sterling Co Irrigation Conservation WMS Supply	4-144	4.6-5			44							45					Corrected table in plan.
F Tom Green Co Irrigation Conservation WMS Supply	4-144	4.6-5			5,690							5,774					Corrected table in plan.
F Winkler Co Irrigation Conservation WMS Supply	4-144	4.6-5			195							194					Corrected table in plan.
F Costs for Roberts Co Area	4-163	4.8-8	768,821,000		4	4	4	4	\$25,000.00	na				<u> </u>		na	Not a recommended or alternate strategy. Not included in DB12.
F City of Snyder-Potiential Water Conservation Summary	4-165	4.8-9	522.000	\$56,052.00	\$61,357	\$59,809.00	\$57,823.00	\$55,694.00	\$54,185.00		13,976.00	18,898.00	18,973.00	19,026.00	18,969.00	18,901.00	Corrected DB12
F CRMWD-Cost for Supplemental Well	4-171 4-170	4.8-14 4.8-13	522,000 119,617,000							na 131,603,990		1	1				Added to DB12. Corrected text in plan
F Colorado River Municipal Water District Cost for Desalina F Colorado River Municipal Water District Cost for new well	4-170	4.8-16	73,994,000			8,460,000	8.460.000	8,460,000	2.009.000	76,268,000	_	_	8.666.000	8,666,000	2,017,000	2 017 000	Corrected text in plan
F University Lands Contract	4-173	4.8-16	73,334,000		847.000	847,000	65,000	65,000	65,000	70,200,000	-	_	-	-	-	-	Added to DB12.
F Colorado River Municipal Water District Cost for Desalina	4-173	4.8-16	119,617,000		,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6,340,378	6,340,378	6,340,378	131,603,990				13,721,167	2,384,500	2,384,500	Corrected text in plan
F Supplemental Wells	4-173	4.8-16	12,528,000		200,000	400,000	416,000	432,000	448,000	-	-	-	-	- 1	-	-	Corrected capital cost in plan and costs in DB12
F City of San Angelo Cost for Ultimate Capacity Desalination	4-182	4.8-20	40,424,000							-							Not recommended during this plannigng period.
F City of San Angelo McCulloch Co Well Field Cost	4-184	4.8-21	157,126,000							173,307,000							Corrected text in plan
F Irrigation Sutton Co. Cost (summed incorrectly)	NA	4.10-1	164,160							194,940							Corrected text in plan
F CRMWD Reuse cost	NA	4.10-2	148,302,000							128,748,000							Corrected text in plan
F CRMWD Supplemental Wells cost F CRMWD Desalination cost	NA NA	4.10-2 4.10-2	12,528,000 119,616,990							131,603,990				-			Corrected DB12 and text in plan Corrected text in plan
F CRMWD Total cost	NA NA	4.10-2	365,678,990							345,583,990							Corrected DB12 and text in plan
F San Angelo-Subordination WMS Supply	4-191	4.8-25	303,070,330	11,791	11,472	11,153	10,835	10,516	10,196	343,303,330	16,189	15,766	15,344	14,922	14,230	14,077	Corrected DB12 and text in plan
F Bronte - Rehabilitation of Pipeline Supply	4.206	4.10-1		0	0	0	0	0	0		129	129	129	129	129	129	Includes subordination with this strategy. Broke this out in DB12.
F Robert Lee-New WTP and Storage Facilities WMS Supply	4.206	4.10-1		0	0	0	0	0	0		200	200	200	200	200	200	Corrected DB12
F Coke County Total	4.206	4.10-1		680	727	514	612	712	847		1,009	1,056	843	941	1,041	1,176	Corrected DB12 and text in plan
F Coleman - Coleman Co - Conservation WMS	4.206	4.10-1		50	109	141	163	181	187		33	75	90	95	101	107	Corrected text in plan
F Coleman Co WMS Total	4.206	4.10-1		3,597	3,645	3,668	3,681	3,691	3,687		3,580	3,611	3,617	3,613	3,611	3,607	Corrected text in plan
F Eden-Concho Co-Replacement Well not listed in IPP	4.206 4.206	4.10-1 4.10-1		NA 34	NA 1,182	NA 1,889	NA 1,895	NA 1,962	NA 1,962		322 356	322	322	322 2,217	322	322 2,284	Corrected DB12 and text in plan
F Concho County Total F Ector Co Manufacturing-Reuse WMS is not listed in IPP	4.207	4.10-1		NA NA	NA	1,009 NA	1,695 NA	1,902 NA	1,962 NA		0	1,504 350	2,211 105	350	2,284 300	2,284	Corrected DB12 and text in plan This is sales from Odessa. Added to table 4.10-1
F Ector Co Manufacturing Rease WWS is Not instead in in i	4.207	4.10-1		66	149	3	46	86	158		366	449	108	396	386	408	Corrected DB12
F Odessa-Ector Co-Reuse	4.207	4.10-1		0	4,293	4,273	7,262	4,258	4,256		0	3,943	4,168	3,912	3,958	4,006	Corrected Odessa reuse amount to show sales to manufacturing.
F Odessa-Ector Co-Conservation	4.207	4.10-1		540	1,168	1,488	1,657	1,854	2,074		551	1,200	1,536	1,715	1,920	2,149	Corrected db12
F Odessa-Ector Co-Voluntary Redistribution	4.207	4.10-1					10,507	10,502	10,498					4,708	4,708	4,708	Table 4.10-1 includes all sales from CRMWD
F Odessa-Ector Co-Voluntary Redistribution (Develop Aquif	4.207	4.10-1			4,708	4,708	10,507	10,502	10,498			4,800	10,800	10,800	10,800	10,800	DB12 and text match.
F Ector County Total	4.207	4.10-1		5,425	16,809	11,057	18,225	19,403	21,297		5,725	17,109	16,962	18,575	19,703	21,547	Corrected.
E. Diskland CUE Dattlad Water Danager WMC County	4-208	4.10-1		0	0	0	0	0	0		4	1	1	1	1	4	Corrected text in plan. Quantity is less than 1 but DB12 requires entries in
F Richland SUE-Bottled Water Program WMS Supply F Richland SUE-Infrastructure Improvement WMS Supply	4-208 4-208	4.10-1		0	0	0	0	0	0		113	113	113	113	113	113	whole numbers. Corrected DB12
F McCulloch County Total	4-208	4.10-1		2,314	2,640	2,779	2,880	2,937	2,946		2,428	2,754	2,893	2,914	3,051	3,060	Corrected DB12
F Midland-Subordination-WMS Supply (CRMWD)	4-208	4.10-1		4,488	6,055	0	0	0	0		4,488	6,152	211	324	438	553	Corrected text in plan
F Midland County Total	4-208	4.10-1			16,158	35,719	35,864	35,793	35,751		ĺ	16,255	36,130	36,188	36,231		Corrected text in plan
F Ballinger-Runnels Co-Subordination-CRMWD-not listed in	4-209	4.10-1		343	356	227	243	0	0			NA	NA	NA	NA	NA	Corrected text in plan
F Miles-Runnels Co-Subordination	4-209	4.10-1		100	100	100	100	100	100		140	153	163	173	183	193	Corrected text in plan and DB12. Changed Miles to 200 af/y.
F Runnels Co Total	4-209	4.10-1		2,402	2,487	2,315	2,421	2,813	2,806		2,099	2,184	2,151	2,251	2,896	2,899	Corrected text in plan
F Snyder-Scurry Co-Subordination	4-209	4.10-1		511							513						Corrected DB12
F Scurry County Total F Sterling Co Irrigation Conservation WMS Supply	4-209 4-209	4.10-1 4.10-1		635			90	91	92		637			00	00	00	Corrected DB13
F San Angelo-Tom Green Co-Infrastructure Improvement W	4-209	4.10-1		2,274	2,261	2,247	2,233	2,220	2,206		2,308	2,295	2,281	89 2,267	89 2,254	89 2,240	Corrected text in plan Corrected text in plan
F Tom Green Co Total	4-209	4.10-1		27,490	40,555	49,411	56,711	56,340	56,289		27,524	40,589	49,445	56,745	56,374	56,323	Corrected text in plan
F Conservation WMS Total	4-209	4.10-1		3,214	43,147	80,602	81,210	81,851	82,506		3,197	43,113	80,551	81,141	81,769	82,423	Corrected text in plan
F Subordination WMS Total	4-209	4.10-1		43,890	47,047	29,961	31,194	31,427	33,486		43,889	47,141	30,113	31,698	32,248	34,382	Changes to both DB12 and text.
																	Corrected text in plan. Quantity is less than 1 but DB12 requires entries in
F Bottled Water Program WMS Total	4-209	4.10-1		0	0	0	0	0	0		1	1	1	1	1	1	whole numbers.
F Infrastructure Improvement WMS Total	4-209	4.10-1		2,274	2,261	2,247	2,233	2,220	2,206		2,437	2,424	2,410	2,396	2,383	2,369	Changes to both DB12 and text.
F Total for All Strategies	4-209	4.10-1		58,494	127,208	174,442	190,499	192,234	194,710		59,275	128,067	181,342	191,733	193,772	196,322	Changes to both DB12 and text.
																	Incorrect comparison. DB12 contract renewal includes CRMWD sales to others and contract renewal with University Lands. Sales to others may
F CRMWD-Renew Contract WMS	4-210	4.10-1		0	5,200	5,200	5,200	5,200	5,200		392	5,622	15,629	15,430	16,119	15,932	come from subordination supplies.
. C.INTAD RELIEN CONTRACT AND	7 210	7.10 1		<u> </u>	3,200	3,200	5,200	3,200	3,200		332	3,022	13,023	13,430	10,113	10,002	come nom auborumation aupplies.

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uo	Page	Table	non-decadal							decadal							Response
item	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060	
2 133																	Changes to both DD12 and tout. Notes sales to others inleudes
E CONTINUE C. L. III III MARCO	4 210	4 4 0 4		40.027	47.422	46.240	45 247	44.452	42.560		47.640	46.000	26.022	25.442	22.075	22.204	Changes to both DB12 and text. Note: sales to others inlcudes
F CRMWD -Subordination WMS Supply	4-210	4.10-1		48,027	47,133	46,240	45,347	44,453	43,560		47,618	46,809	36,022	35,443	33,975	33,381	subordination supplies.
F CRMWD Total	4-210	4.10-1		48,027	64,713	69,820	78,427	77,533	76,640		48,010	64,811	70,031	78,753	77,974	77,193	Changes to both DB12 and text.
F University Lands - New/Renew Water Supply Contract	4-210	4.10-1		NA	NA	NA	NA	NA	NA		0	5,200	5,200	5,950	5,960	5,973	Added to table 4.10-2.
F WWP WMS Totals	4-210	4.10-1		66,473	89,537	97,622	113,506	112,021	111,076		84,954	125,541	133,699	151,761	151,521	152,545	Corrected table.
F San Angelo -WWP	4-211	4.10-2	254,904,000							na							Costs are shown on WUG in DB12.
F Brown C-O Brownwood Lake	App. 3A-3	App 3A		229	229	223	214	211	211		385	385	379	370	367	367	
F Brown Co. Zephyr WSC Brownwood Lake	App. 3A-4	App 3A		616	616	616	616	616	616		516	516	516	516	516	516	=
F Coke Co. Bronte Village Other Aquifer	App. 3A-4	App 3A		116	129	125	121	120	120		250	238	226	215	204	194	
				307	307	307	307	307	307		207	207	207	207	207	207	-
F Coleman Co. Santa Anna Brownwood Lake	App. 3A-7	App 3A					1	307	307								
F Concho Co. Eden Direct Reuse	App. 3A-8	App 3A		-	-	-	-	-	-		80	220	220	220	220	220	-
F Concho Co. Millersville-Doole WSC CRMWD	App. 3A-8	App 3A		92	85	123					46	43	62	56			
F Ector Co. Mfg Colorado Basin CRMWD	App. 3A-12	App 3A		177	297	604	702	771	813		877	797	1,199	902	871	813	Appendix 3A was updated with the latest DB12 download. All numbers
F Ector Co. Odessa CRMWD	App. 3A-12	App 3A		11,949	11,350	17,464	17,158	17,354	17,159		11,176	10,757	16,708	16,793	17,092	17,006	should match.
F McCulloch Co. Brady Hickory Aquifer	App. 3A-19	App 3A		1,009	1,009	1,009	1,009	1,009	1,009		884	884	884	884	884	884	
F McCulloch Co. Millersville-Doole WSC CRMWD	App. 3A-19	App 3A		161	164	238	216	·			91	82	119	108			1
F Runnels Co. Ballinger O.H. Ivie Lake	App. 3A-28	App 3A		-	-	-	_				257	244	373	357			1
F Runnels Co. Miles Other Aquifer	App. 3A-29	App 3A	+	134	134	134	134	134	134		10	10	10	10	10	10	1
<u>'</u>			+	69	62		85	154	134		35				10	10	4
F Runnels Co. Millersville-Doole WSC CRMWD	App. 3A-29	App 3A				93						31	47	43			4
F Tom Green Co. Millersville-Doole WSC CRMWD	App. 3A-36	App 3A		174	176	290	300	-	-		87	88	145	150	-	-	
F Brown County WID Brownwood Lake	NA	App 3B		29,712	29,712	29,712	29,712	29,712	29,712		29,644	29,641	29,648	29,505	29,016		DB12 corrected.
F CRMWD Total Current Supply	NA	App 3B		74,485	67,935	66,585	65,235	63,885	62,535		74,468	67,918	66,568	65,218	63,868	62,518	DB12 corrected.
F Ballinger cost for reuse	2 of 48	appendix 4D	2,567,000	324,000						-	-						Added to DB12.
F Big Spring cost for reuse	6 of 48	appendix 4D	9,911,000	1,529,000						-	-						Included with CRMWD costs.
F Bronte cost for rehab of Oak Creek Pipeline	8 of 48	appendix 4D	5,5 = 2,5 5 5	34,100							_						Bronte cost was revised based on comments received frm Bronte.
F CRMWD cost for Southwest Pecos Co to Odessa	11 of 48	appendix 4D	183,321,000	22,279,000						_	_						Not a recommended strategy
 		+ ''		22,273,000	-												5,
F City of Eden Cost for Advanced Treatment	18 of 48	appendix 4D	2,582,000							4,382,000							Corrected DB12 to show as separate strategies
F City of Eden Cost for replacent wells	19 of 48	appendix 4D	1,800,000							1,367,372							Corrected DB12 to show as separate strategies
F City of Eden Cost for Bottled Water program	20 of 48	appendix 4D		24,000							38,566	38,566	38,566	38,566	38,566	38,566	Corrected DB12. Annual costs are \$33,000.
F Cost of Odessa-Midland Reuse	28 of 48	appendix 4D	109,194,000	13,272,000						-	-						Included with CRMWD costs.
F Robert Lee cost of new groundwater from Alluvium	35 of 48	appendix 4D		157,000							396,500	396,500	25,950	25,950	25,950	25,950	Corrected DB12.
F San Angelo cost of Desal	37 of 48	appendix 4D		9,223,930										2,648,800	2,648,800	13,721,167	Corrected DB12.
F San Angelo cost of Desal phase II	38 of 48	appendix 4D	40,327,000	12,039,500						_	-						Not included in this planning cycle.
F Snyder Cost for reuse	47 of 48	appendix 4D	9,643,000	1,104,000						_	_						Included with CRMWD costs.
F Irrigation Costs for Irion Co.	2 of 6	appendix 4E	3,043,000	1,104,000	1,536							91,536					Corrected DB12.
F Irrigation Costs for Mitchell Co.	4 of 6	appendix 4E			185,113							285,113					Corrected DB12.
F Irrigation Costs for Ward Co.	6 of 6	appendix 4E				31,803							121,803				Corrected DB12.
		WMS															
		Summary of															Annual dividition final along Comment to bla
		Rec.															Appendix 4I in final plan. Correct table.
F CRMWD cost for reuse	appendix 4H	Strategies	148,302,000							128,748,000							
	аррелии тп	Summary of	2.0,502,000					+		123,7 40,000							†
		1 1															Annuadiy Al in final plan. Correct table 1 DB43
5 COMMUN C		Rec.															Appendix 4I in final plan. Correct table and DB12.
F CRMWD Supplemental Wells cost	appendix 4H	Strategies	12,528,000				ļ			-							4
F Bottle Water Program (McCulloch C-O) WMS Supply	Appendix4H	Summary		0	0	0	0	0	0		0	0	0	0	0	0	_
F Bottle Water Program Richland SUD) WMS Supply	Appendix4H	Summary		0	0	0	0	0	0		1	1	1	1	1	1	
F New Infrastructure Improvement - Bronte WMS Supply	Appendix4H	Summary		0	0	0	0	0	0		129	129	129	129	129	129	
F New Infrastructure Improvement - San Angelo WMS Supp	Appendix4H	Summary		2,274	2,261	2,247	2,233	2,220	2,206		2,308	2,295	2,281	2,267	2,254	2,240	1
F Reuse-Odessa (Ector Co.) - WMS Supply	Appendix4H	Summary		,	4,293	4,273	4,262	4,258	4,256		,	3,943	4,168	3,912	3,958	4,006	1
F Reuse-Manufacturing(Ector Co.) WMS Supply		Summary	+		4,293 NA	4,273 NA	4,202 NA		4,230 NA				105	350		250	1
5, , , , ,	Appendix4H		+	1.050				NA 1.630			2.020	350			300		-
F Subordination-Coleman(Coleman Co.) WMS Supply	Appendix4H	Summary		1,650	1,651	1,647	1,645	1,639	1,631		2,030	2,031	2,027	2,025	2,019	2,011	Appendix 4H was updated with the latest DB12 download. All numbers
F Subordination-Manufacturing (Ector Co.) WMS Supply	Appendix4H	Summary		66	149	3	46	86	158		366	449	108	396	386	408	should match.
F Subordination-Midland (Midland Co) WMS Supply	Appendix4H	Summary		4,488	6,055	0	0	0	0		4,505	6,055	0	0	0	0	
F Subordination-Midland (Midland Co) WMS Supply	Appendix4H	Summary		17	-97	-211	-324	-438	-553		NA	NA	NA	NA	NA	NA	
F Subordination-Miles-Runnels Co-WMS Supply	Appendix4H	Summary		100	100	100	100	100	100		140	153	163	173	183	193	
F Subordination-Snyder-Scurry Co-WMS Supply	Appendix4H	Summary		511							513			_			1
F Subordination-CRMWD WMS Supply	Appendix4H	Summary	+	35,166	30,548	46,240	43,696	41,857	38,746		47,618	46,809	36,022	35,443	33,975	33,381	1
			+														4
F Voluntary Redistribution - CRMWD WMS Supply	Appendix4H	Summary	1	0	5,200	5,200	5,200	5,200	5,200		392	5,622	15,629	15,430	16,119	15,932	4
F Ballinger-Subordination-CRMWD-not listed in DB12	Appendix4H	1 of 99		141	169	68	115	0	0		NA	NA	NA	NA	NA	NA	4
F Ballinger WMS Total	Appendix4H	1 of 99		1,091	1,187	1,095	1,144	1,524	1,542		950	1,018	1,027	1,029	1,631	1,634	
F Ballinger Alternative WMS Supply - Direct Reuse not listed	Appendix4H	1 of 99		220	220	220	220	220	220		NA	NA	NA	NA	NA	NA	
F Bronte - Rehabilitation of Pipeline WMS Supply	Appendix4H	5 of 99		0	0	0	0	0	0		129	129	129	129	129	129	
	P.P		1	· · · · · ·		•		-	-								J

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	reference.		iff document number							Online Planning Database (DB12) number							
4										non-							
E	Page	Table	non-decadal							decadal							Response
ຼື ltem	number	number	number	2010	2020	2030	2040	2050	2060	number	2010	2020	2030	2040	2050	2060	
F Bronte WMS Total	Appendix4H	5 of 99		145	174	177	177	179	180		274	303	306	306	308	309	
F Coleman-Conservation WMS Supply	Appendix4H	6 of 99		50	109	141	163	181	187		33	75	90	95	101	107	
F Coleman-Subordination-Coleman Lake WMS Supply	Appendix4H	6 of 99		6,415	4,084	4,017	3,952	3,883	3,811		1,650	1,651	1,647	1,645	1,639	1,631	
F Coleman-Subordination-Hords Creek Lake WMS Supply	Appendix4H	6 of 99		647	643	640	637	633	630		380	380	380	380	380	380	
F Coleman-Total WMS Supply	Appendix4H	6 of 99		4,854	4,836	4,798	4,752	4,697	4,628		2,063	2,106	2,117	2,120	2,120	2,118	
F Runnels C-O Subordination (Winters Lake) WMS Supply	Appendix4H	20 of 99		114	89	69	49	31	0		23	0	0	0	0	0	
F Runnels C-O Subordination Ballinger Lake) WMS Supply	Appendix4H	20 of 99		23	0	0	0	0	0		114	89	69	49	31	0	
F Eden - New Hickory Well (Replacement Well in DB12) WM	Appendix4H	26 of 99		392	392	392	392	392	392		322	322	322	322	322	322	
F Eden - New Reverse Osmosis (Advanced Treatment in DB	Appendix4H	26 of 99		0	0	0	0	0	0		0	392	392	392	392	392	
F Eden - WMS Total	Appendix4H	26 of 99		392	392	392	392	392	392		322	714	714	714	714	714	
F Meneard-Alternative WMS-Aquifer Storage Recovery WM	Appendix4H	31 of 99		0	0						240	240					
F Menard-Alternative WMS-Off Channel Reservoir not liste	Appendix4H	31 of 99		NA	NA	NA	NA	NA	NA		500	500	500	500	500	500	
F Menard-Alternative WMS Total	Appendix4H	31 of 99		0	0	240	240	240	240		740	740	740	740	740	740	
F Midland - Subordination-CMWD System WMS Supply	Appendix4H	32 of 99		4,488	6,055	0	0	0	0		4,505	6,055	0	0	0	0	
F Midland - Subordination-OH Ivie LakeWMS Supply	Appendix4H	32 of 99		17	-97	-211	-324	-438	-553		17	-97	-211	-324	-438	-553	
F Midland - WMS Totals	Appendix4H	32 of 99		5,849	13,963	31,839	31,726	31,608	31,499		5,849	14,060	32,050	32,050	32,046	32,052	
F Millersview-Doole WSC-Subordination WMS Supply	Appendix4H	33 of 99		242	257	128	144				190	241	3	46	0	0	
F Millersview-Doole WSC- WMS Supply Total	Appendix4H	33 of 99		242	257	128	144				190	241	3	46			Appendix 4H was updated with the latest DB12 download. All numbers
F Odessa-New/Renew Water Supply WMS	Appendix4H	34 of 99			4,450	4,695	4,450	4,500	4,550			4,800	4,800	4,800	4,800	4,800	should match.
F Odessa-Subordination WMS Supply	Appendix4H	34 of 99		4,205							4,505						
F Odessa - Reuse WMS - listed as alternative WMS in IPP.	Appendix4H	34 of 99		4,410	4,410	4,410	4,410	4,410	4,410		4,060	4,305	4,060	4,110	4,160		
F Odessa-WMS Supply Total	Appendix4H	34 of 99		4,756	11,437	6,318	13,316	14,430	16,163		5,056	15,847	16,728	17,726	18,840	20,573	
F Richland SUD - Replacement Well WMS Supply	Appendix4H	36 of 99		0	0	0	0	0	0		113	113	113	113	113	113	
F Richland SUD Total WMS Supply	Appendix4H	36 of 99		1	1	1	1	1	1		114	114	114	114	114	114	
F Robert Lee-New WTP and Storage Facilities WMS Supply in	Appendix4H	37 of 99		NA	NA	NA	NA	NA	NA		200	200	200	200	200	200	
F Robert Lee Total WMS Supply	Appendix4H	37 of 99		111	155	46	66	80	103		311	355	246	266	280	303	
F Robert Lee-Alternative WMS-Develop Other Aquifer Supp	Appendix4H	37 of 99		NA	NA	NA	NA	NA	NA		150	150	150	150	150	150	
F Robert Lee-Alternative WMS-New Reservoir Intake not lis	Appendix4H	37 of 99		NA	NA	NA	NA	NA	NA		50	50	50	50	50	50	
F Robert Lee Total Alternative WMS Supply	Appendix4H	37 of 99			500	500	500	500	500		700	700	700	700	700	700	
F San Angelo-Rehabilitation of Pipe WMS Supply	Appendix4H	38 of 99		0	0	2,247	2,233	2,220	2,206		2,308	2,295	2,281	2,267	2,254	2,240	
F San Angelo-Subordination-OC Fisher Lake WMS Supply	Appendix4H	38 of 99		3,762	3,643	3,525	3,407	3,288	3,170		3,762	3,643	3,525	3,407	3,288	3,170	
F San Angelo-Brush Control WMS Supply	Appendix4H	38 of 99		0	0	0	0	0	0		8,362	8,362	8,362	8,362	8,362	8,362	
F San Angelo WMS Supply Total	Appendix4H	38 of 99		-							20,586	27,686	30,718	37,870	37,462	36,994	
F Snyder-Subordination WMS Supply	Appendix4H	39 of 99		511							513						
F Snyder WMS total Supply	Appendix4H	39 of 99	-	581							583						
F Irrigation-Andrews Co WMS Supply	Appendix4H	43 of 99		2,728							2,727						1
F Manufacturing-Ector Co. Subordination WMS Supply	Appendix4H	76 of 99			149	3	46	86	158			449	108	396	386	408	
F Manufacturing-Ector Co. WMS Supply total	Appendix4H	76 of 99			499	108	396	386	408			799	213	746	686	658	1
F Steam Electric-Mitchell Co-Alternative Generation Techno	Appendix4H	98 of 99		NA	NA	NA	NA	NA	NA		4,077	2,774	4,240	5,988	8,079	10,590	