

Appendix 4I
Lists of Recommended and Alternative Strategies

List of Potentially Feasible Strategies

Advanced Treatment
Alternative Generation Technology
Aquifer Storage and Recovery
Bottled Water Program
Brush Control
Desalination
Develop Pecos Valley Aquifer Supplies
Develop Edwards Trinity Aquifer Supplies
Develop Ellenburger Aquifer Supplies
Develop Hickory Aquifer Supplies
Develop Other Aquifer Supplies
Irrigation Conservation
Municipal Conservation
New Reservoir Intake
New WTP and Storage Facilities
New Renew Water Supply
New Renew Water Supply - New Infrastructure
Off Channel Reservoir
Rehabilitation of Pipeline
Replacement Well
Reuse
Subordination
Water Marketing (Mesa)
Weather Modification

Summary of Recommended Strategies

Entity	County Used	Basin Used	Total Capital Cost	1st Decade Unit Cost	Supply (Ac-ft/yr)						2060 Unit Cost
					2010	2020	2030	2040	2050	2060	
Bottle Water Program											
County-Other	McCulloch	Colorado	\$0	\$28,780	0.00	0.14	0.14	0.14	0.14	0.14	\$28,780
Richland SUD	McCulloch	Colorado	\$3,000	\$28,780	0.00	0.35	0.35	0.35	0.35	0.35	\$28,780
Total			\$3,000	\$28,780	0.00	0.49	0.49	0.49	0.49	0.49	\$28,780
Brush Control											
City of San Angelo	Tom Green	Colorado	\$23,020,000	\$0	8,362	8,362	8,362	8,362	8,362	8,362	\$0
Total			\$23,020,000	\$0	8,362	8,362	8,362	8,362	8,362	8,362	\$0
Municipal Conservation											
City of Andrews	Andrews	Colorado	\$0	\$628	84	191	240	265	287	310	\$185
City of Bronte	Coke	Colorado	\$0	\$334	16	45	48	48	50	51	\$188
City of Robert Lee	Coke	Colorado	\$0	\$356	16	40	44	45	46	48	\$199
City of Coleman	Coleman	Colorado	\$0	\$192	33	75	90	95	101	107	\$101
City of Odessa	Ector	Colorado	\$0	\$869	540	1,168	1,488	1,657	1,854	2,074	\$238
City of Big Spring	Howard	Colorado	\$0	\$540	241	603	676	698	725	754	\$153
City of Brady	McCulloch	Colorado	\$0	\$351	77	192	214	222	230	239	\$132
City of Menard	Menard	Colorado	\$0	\$218	10	24	28	30	32	33	\$211
City of Midland	Midland	Colorado	\$0	\$448	1,344	2,616	3,061	3,261	3,457	3,663	\$132
City of Odessa	Midland	Colorado	\$0	\$869	11	32	48	58	66	75	\$238
City of Ballinger	Runnels	Colorado	\$0	\$665	33	88	107	119	131	144	\$208
City of Winters	Runnels	Colorado	\$0	\$705	21	55	63	67	71	76	\$248
City of Snyder	Scurry	Colorado	\$0	\$200	70	154	191	205	220	234	\$81
City of San Angelo	Tom Green	Colorado	\$0	\$328	701	1,705	2,009	2,127	2,255	2,371	\$110
Total			\$0	\$498	3,197	6,988	8,307	8,897	9,525	10,179	\$154
Irrigation Conservation											
Irrigation	Andrews	Colorado	\$4,822,904	\$64	0	2,727	5,455	5,455	5,455	5,455	\$64
Irrigation	Borden	Brazos	\$196,062	\$76	0	94	189	189	189	189	\$75
Irrigation	Borden	Colorado	\$282,138	\$75	0	136	271	271	271	271	\$76
Irrigation	Brown	Colorado	\$54,917	\$21	0	93	185	185	185	185	\$22
Irrigation	Concho	Colorado	\$1,895,367	\$92	0	748	1,496	1,496	1,496	1,496	\$92
Irrigation	Ector	Colorado	\$301,633	\$45	0	243	485	485	485	485	\$45
Irrigation	Ector	Rio Grande	\$3,047	\$55	0	2	5	5	5	5	\$44
Irrigation	Glasscock	Colorado	\$11,422,560	\$114	0	3,631	7,262	7,262	7,262	7,262	\$114
Irrigation	Howard	Colorado	\$647,652	\$72	0	327	653	653	653	653	\$72
Irrigation	Irion	Colorado	\$21,137	\$21	0	37	73	73	73	73	\$21
Irrigation	Kimble	Colorado	\$141,658	\$70	0	74	147	147	147	147	\$70
Irrigation	Martin	Colorado	\$4,001,621	\$83	0	1,751	3,502	3,502	3,502	3,502	\$83
Irrigation	Mason	Colorado	\$713,460	\$35	0	746	1,491	1,491	1,491	1,491	\$35
Irrigation	McCulloch	Colorado	\$166,844	\$31	0	197	394	394	394	394	\$31
Irrigation	Menard	Colorado	\$16,029	\$25	0	23	46	46	46	46	\$25

Summary of Recommended Strategies

Entity	County Used	Basin Used	Total Capital Cost	1st Decade Unit Cost	Supply (Ac-ft/yr)						2060 Unit Cost
					2010	2020	2030	2040	2050	2060	
Irrigation	Midland	Colorado	\$3,169,471	\$64	0	1,800	3,600	3,600	3,600	3,600	\$64
Irrigation	Mitchell	Colorado	\$2,548,056	\$107	0	865	1,729	1,729	1,729	1,729	\$107
Irrigation	Pecos	Rio Grande	\$8,329,226	\$48	0	6,300	12,600	12,600	12,600	12,600	\$48
Irrigation	Reagan	Colorado	\$6,275,976	\$116	0	1,968	3,936	3,936	3,936	3,936	\$116
Irrigation	Reeves	Rio Grande	\$8,253,318	\$51	0	5,824	11,648	11,648	11,648	11,648	\$51
Irrigation	Schleicher	Colorado	\$146,895	\$60	0	89	178	178	178	178	\$60
Irrigation	Schleicher	Rio Grande	\$30,087	\$61	0	18	36	36	36	36	\$61
Irrigation	Scurry	Brazos	\$361,342	\$82	0	160	320	320	320	320	\$82
Irrigation	Scurry	Colorado	\$929,166	\$82	0	411	823	823	823	823	\$82
Irrigation	Sterling	Colorado	\$25,860	\$21	0	45	89	89	89	89	\$21
Irrigation	Sutton	Colorado	\$60,431	\$50	0	44	88	88	88	88	\$50
Irrigation	Sutton	Rio Grande	\$134,509	\$50	0	98	196	196	196	196	\$50
Irrigation	Tom Green	Colorado	\$10,120,488	\$64	0	5,774	11,548	11,548	11,548	11,548	\$64
Irrigation	Upton	Colorado	\$2,885,269	\$115	0	911	1,822	1,822	1,822	1,822	\$115
Irrigation	Upton	Rio Grande	\$58,883	\$238	0	9	18	18	18	18	\$238
Irrigation	Ward	Rio Grande	\$437,760	\$20	0	785	1,570	1,570	1,570	1,570	\$20
Irrigation	Winkler	Rio Grande	\$196,902	\$37	0	195	389	389	389	389	\$37
Total			\$68,650,668	\$69	0	36,125	72,244	72,244	72,244	72,244	\$69
Desalination											
City of Andrews	Andrews	Colorado	\$6,717,000	\$1,163	0	950	950	950	950	950	\$546
CRMWD			\$131,603,990	\$0	0	0	0	9,500	9,500	9,500	\$251
San Angelo			\$75,440,000	\$0	0	0	0	5,600	5,600	5,600	\$473
Total			\$213,760,990	\$1,163	0	950	950	16,050	16,050	16,050	\$346
Infrastructure Improvements											
City of Bronte	Coke	Colorado	\$1,364,900	\$0	0	0	0	0	0	0	\$0
City of Robert Lee	Coke	Colorado	\$2,436,000	\$0	0	0	0	0	0	0	\$0
Richland SUD	McCulloch	Colorado	\$5,148,000	\$0	0	200	200	200	200	200	\$370
San Angelo	Tom Green	Colorado	\$6,157,000	\$315	2,274	2,261	2,247	2,233	2,220	2,206	\$78
Total			\$15,105,900	\$315	2,274	2,461	2,447	2,433	2,420	2,406	\$448
New Groundwater											
Colorado City	Mitchell	Colorado	\$17,855,000	\$0	0	2,200	2,200	2,200	2,200	2,200	\$445
City of Menard	Menard	Colorado	\$1,684,000	\$1,664	140	139	140	140	141	141	\$610
County-Other	Menard	Colorado	\$0	\$0	20	21	20	20	19	19	\$0
City of Midland	Midland	Colorado	\$168,507,000	\$0	0	0	13,600	13,600	13,600	13,600	\$342
CRMWD	Multiple	Colorado	\$76,268,000	\$0	0	0	6,000	6,000	6,000	6,000	\$251
San Angelo	Tom Green	Colorado	\$173,307,000	\$0	0	6,700	10,000	12,000	12,000	12,000	\$1,670
Total			\$437,621,000	\$1,456	160	6,860	29,760	31,760	31,760	31,760	\$858
Advanced treatment											
City of Eden	Concho	Colorado	\$2,582,000	NA	0	0	0	0	0	0	NA

Summary of Recommended Strategies

Entity	County Used	Basin Used	Total Capital Cost	1st Decade Unit Cost	Supply (Ac-ft/yr)						2060 Unit Cost
					2010	2020	2030	2040	2050	2060	
Reuse											
City of Odessa	Ector	Colorado	\$0	\$0	0	3,943	4,168	3,912	3,958	4,006	\$0
Manufacturing	Ector	Colorado	\$0	\$0	0	350	105	350	300	250	\$0
City of Big Spring	Howard	Colorado	\$0	\$0	0	1,855	1,855	1,855	1,855	1,855	\$0
City of Midland	Midland	Colorado	\$0	\$0	0	5,389	5,389	5,389	5,389	5,389	\$0
City of Odessa	Midland	Colorado	\$0	\$0	0	117	137	148	152	154	\$0
City of Winters	Runnels	Colorado	\$2,158,000	\$0	0	0	0	110	110	110	\$636
City of Snyder	Scurry	Colorado	\$0	\$0	0	726	726	726	726	726	\$0
CRMWD	Multiple	Colorado	\$128,748,000	\$1,072	0	see customers for supply amounts.					\$383
Total			\$130,906,000	\$1,072	0	12,380	12,380	12,490	12,490	12,490	\$383
Subordination											
City of Bronte	Coke	Colorado	\$0	\$0	129	129	129	129	129	129	\$0
City of Robert Lee	Coke	Colorado	\$0	\$0	95	115	2	21	34	55	\$0
County-Other	Coke	Colorado	\$0	\$0	28	32	0	6	9	15	\$0
Mining	Coke	Colorado	\$0	\$0	86	119	2	24	43	72	\$0
Steam Electric Power	Coke	Colorado	\$0	\$0	310	247	289	339	401	477	\$0
City of Coleman	Coleman	Colorado	\$0	\$0	1,650	1,651	1,647	1,645	1,639	1,631	\$0
City of Coleman	Coleman	Colorado	\$0	\$0	380	380	380	380	380	380	\$0
Coleman County WSC	Coleman	Colorado	\$0	\$0	126	114	109	103	101	99	\$0
County-Other	Coleman	Colorado	\$0	\$0	20	19	19	18	18	18	\$0
Irrigation	Coleman	Colorado	\$0	\$0	1,348	1,348	1,348	1,348	1,348	1,348	\$0
Manufacturing	Coleman	Colorado	\$0	\$0	6	6	6	6	6	6	\$0
Mining	Coleman	Colorado	\$0	\$0	17	18	18	18	18	18	\$0
County-Other	Concho	Colorado	\$0	\$0	25	25	25	25	25	25	\$0
Millersview-Doole WSC	Concho	Colorado	\$0	\$0	34	42	1	7	0	0	\$0
Ector County UD	Ector	Colorado	\$0	\$0	400	613	11	151	272	478	\$0
Manufacturing	Ector	Colorado	\$0	\$0	366	149	3	46	86	158	\$0
City of Odessa	Ector	Colorado	\$0	\$0	4,019	5,611	59	1,085	1,913	3,314	\$0
City of Big Spring	Howard	Colorado	\$0	\$0	1,345	1,672	24	299	491	796	\$0
City of Coahoma	Howard	Colorado	\$0	\$0	49	61	1	11	18	29	\$0
Manufacturing	Howard	Colorado	\$0	\$0	267	349	5	71	124	220	\$0
Mining	Howard	Colorado	\$0	\$0	400	523	9	101	171	285	\$0
City of Junction	Kimble	Colorado	\$0	\$0	991	991	991	991	991	991	\$0
County-Other	Kimble	Colorado	\$0	\$0	9	9	9	9	9	9	\$0
Manufacturing	Kimble	Colorado	\$0	\$0	1,000	1,000	1,000	1,000	1,000	1,000	\$0
City of Brady	McCulloch	Colorado	\$0	\$0	2,170	2,170	2,170	2,170	2,170	2,170	\$0
Millersview-Doole WSC	McCulloch	Colorado	\$0	\$0	67	81	1	14	0	0	\$0
City of Midland	Midland	Colorado	\$0	\$0	4,488	6,152	211	324	438	553	\$0
City of Midland	Midland	Colorado	\$0	\$0	17	(97)	(211)	(324)	(438)	(553)	\$0
City of Odessa	Midland	Colorado	\$0	\$0	186	176	28	66	97	150	\$0
Steam Electric Power	Mitchell	Colorado	\$0	\$0	5,023	4,847	4,670	4,493	4,317	4,140	\$0
City of Ballinger	Runnels	Colorado	\$0	\$0	917	930	920	910	900	890	\$0
City of Ballinger	Runnels	Colorado	\$0	\$0	141	169	68	115	0	0	\$0
Coleman County WSC	Runnels	Colorado	\$0	\$0	18	30	39	48	56	66	\$0
County-Other	Runnels	Colorado	\$0	\$0	23	0	0	0	0	0	\$0

Summary of Recommended Strategies

Entity	County Used	Basin Used	Total Capital Cost	1st Decade Unit Cost	Supply (Ac-ft/yr)						2060 Unit Cost
					2010	2020	2030	2040	2050	2060	
County-Other	Runnels	Colorado	\$0	\$0	114	89	69	49	31	0	\$0
County-Other	Runnels	Colorado	\$0	\$0	193	177	148	116	0	0	\$0
Manufacturing	Runnels	Colorado	\$0	\$0	54	60	65	70	74	79	\$0
Manufacturing	Runnels	Colorado	\$0	\$0	9	10	11	12	0	0	\$0
City of Miles	Runnels	Colorado	\$0	\$0	200	200	200	200	200	200	\$0
Millersview-Doole WSC	Runnels	Colorado	\$0	\$0	25	31	0	6	0	0	\$0
City of Winters	Runnels	Colorado	\$0	\$0	552	561	566	571	575	591	\$0
County-Other	Scurry	Colorado	\$0	\$0	54	66	1	12	20	33	\$0
City of Snyder	Scurry	Colorado	\$0	\$0	511	641	9	117	194	315	\$0
County-Other	Tom Green	Colorado	\$0	\$0	250	250	250	250	250	250	\$0
Irrigation	Tom Green	Colorado	\$0	\$0	3,377	3,273	3,170	3,066	2,693	2,860	\$0
Manufacturing	Tom Green	Colorado	\$0	\$0	2,226	2,498	2,737	2,971	3,175	3,425	\$0
Millersview-Doole WSC	Tom Green	Colorado	\$0	\$0	64	87	1	19	0	0	\$0
City of San Angelo	Tom Green	Colorado	\$0	\$0	5,436	5,078	4,752	4,431	4,141	3,804	\$0
City of San Angelo	Tom Green	Colorado	\$0	\$0	3,637	3,518	3,400	3,282	3,163	3,045	\$0
City of San Angelo	Tom Green	Colorado	\$0	\$0	17	(97)	(211)	(324)	(438)	(553)	\$0
Steam Electric Power	Tom Green	Colorado	\$0	\$0	1,021	1,021	1,021	1,021	1,021	1,021	\$0
CRMWD (not assigned) ¹	Multiple	Colorado	\$0	\$0	32,447	27,657	33,056	30,488	27,842	24,702	\$0
San Angelo	Multiple	Colorado	\$0	\$0	See customers for supply amounts						\$0
UCRA	Multiple	Colorado	\$0	\$0	See customers for supply amounts						\$0
Total			\$0	\$0	76,337	74,801	63,228	62,006	59,707	58,741	\$0
Replacement Wells											
City of Eden	Concho	Colorado	\$1,800,000	NA	0	0	0	0	0	0	NA
Richland SUD	McCulloch	Colorado	\$1,701,000	NA	0	0	0	0	0	0	NA
CRMWD	Multiple	Colorado	\$10,440,000	NA	0	0	0	0	0	0	NA
Total			\$13,941,000	NA	0	0	0	0	0	0	NA
Voluntary Redistribution²											
City of Andrews	Andrews	Colorado	\$0	\$0	0	0	0	750	760	773	\$477
Millersview-Doole WSC	Concho	Colorado	\$0	\$0	0	0	0	0	74	74	\$477
City of Odessa	Ector	Colorado	\$0	\$0	0	0	0	5,799	5,794	5,790	\$477
City of Odessa	Midland	Colorado	\$0	\$0	0	0	0	201	206	210	\$477
City of Stanton	Martin	Colorado	\$0	\$477	392	422	429	430	415	393	\$477
Millersview-Doole WSC	McCulloch	Colorado	\$0	\$0	0	0	0	0	143	143	\$477
City of Midland	Midland	Colorado	\$0	\$0	0	0	10,000	9,800	9,600	9,400	\$477
City of Ballinger	Runnels	Colorado	\$0	\$0	0	0	0	0	493	508	\$477
County-Other	Runnels	Colorado	\$0	\$477	0	0	0	0	94	77	\$477
Manufacturing	Runnels	Colorado	\$0	\$477	0	0	0	0	13	15	\$477
Millersview-Doole WSC	Runnels	Colorado	\$0	\$0	0	0	0	0	58	58	\$477
Millersview-Doole WSC	Tom Green	Colorado	\$0	\$0	0	0	0	0	225	225	\$477
CRMWD	Multiple	Colorado	\$8,964,000	\$0	0	5,200	5,200	5,200	5,200	5,200	\$477
Total			\$8,964,000	\$477	392	5,622	15,629	22,180	23,075	22,866	\$477
Weather Modification											
Irrigation	Irion	Colorado	\$0	0	0	0	0	0	0	0	0
Irrigation	Mitchell	Colorado	\$0	0	0	0	0	0	0	0	0
Irrigation	Ward	Rio Grande	\$0	0	0	0	0	0	0	0	0
Total			\$0	0	0	0	0	0	0	0	\$0

1. Some of the water developed from Subordination is provided to customers through Voluntary Redistribution. To avoid duplication of water this supply is not listed here under subordination.
2. Voluntary Redistribution uses water developed from other strategies.

