



Attachments 5-2 and 5-3
Strategy Evaluation Matrix and Quantified
Environmental Impact Matrix

Attachment 5-2
Strategy Evaluation Matrix

Entity	County Used	Basin Used	Strategy	Quantity (Ac-Ft/Yr)	Maximum Need	Percentage of Max Need Met	Quantity Score	Reliability	Annual Cost (\$/Ac-Ft)	Cost Score	Impacts of Strategy on:				Overall Score (5-40)
											Environmental Factors	Agricultural Resources/Rural Areas	Other Natural Resources	Key Water Quality Parameters	
Claude	Armstrong	Red	Conservation	29	110	26%	2	3	\$714	4	5	5	5	5	29
			New Groundwater (Ogallala)	400	110	363%	5	3	\$790	4	3	4	3	2	24
Panhandle	Carson	Red	Conservation	48	582	8%	1	3	\$795	4	5	5	5	5	28
			New Groundwater (Ogallala)	600	582	103%	5	5	\$621	4	3	4	3	2	26
Wellington	Collingsworth	Red	Conservation	50	0	N/A	5	3	\$806	4	5	5	5	5	32
			New Groundwater (Seymour)	180	0	N/A	5	2	\$1,485	3	3	3	3	2	21
			Expanded Use (RO Treatment)	180	0	N/A	5	2	\$2,860	2	3	3	3	2	20
Dalhart	Dallam	Canadian	Conservation	113	2,807	4%	1	3	\$364	5	5	5	5	5	29
			New Groundwater (Ogallala)	2,700	2,807	96%	4	3	\$172	5	3	3	3	2	23
Texline	Dallam	Canadian	Conservation	28	161	17%	1	3	\$656	4	5	5	5	5	28
			New Groundwater (Ogallala)	150	161	93%	4	5	\$778	4	3	4	3	2	25
Irrigation	Dallam	Canadian	Conservation	140,612	94,226	149%	5	3	\$17	5	5	5	3	5	31
McLean	Gray	Red	Conservation	27	182	15%	1	3	\$897	4	5	5	5	5	28
			New Groundwater (Ogallala)	200	182	110%	5	5	\$446	5	3	4	4	2	28
Pampa	Gray	Canadian	Conservation	240	3,806	6%	1	3	\$619	4	5	5	5	5	28
			New Groundwater (Ogallala)	2,000	3,806	53%	3	5	\$490	5	3	4	3	2	25
			Purchase from CRMWA	3,114	3,806	82%	4	5	N/A	1	4	3	3	2	22
Memphis	Hall	Red	Conservation	34	133	25%	2	3	\$964	4	5	5	5	5	29
			New Groundwater (Ogallala)	150	133	113%	5	3	\$848	4	3	4	3	2	24
County-Other	Hall	Red	Conservation	26	0	N/A	5	3	\$744	4	5	5	5	5	32
			New Groundwater- Brice-Lesly (Ogallala)	50	0	N/A	5	3	\$688	4	3	4	3	2	24
			New Groundwater-Estelline (Seymour)	50	0	N/A	5	3	\$360	5	3	4	3	2	25
			Expanded Use-Lakeview (RO Treatment)	50	0	N/A	5	3	\$4,462	1	3	3	3	2	20
Gruver	Hansford	Canadian	Conservation	31	344	9%	1	3	\$943	4	5	5	5	5	28
			New Groundwater (Ogallala)	350	344	102%	5	3	\$450	5	3	4	3	2	25
			Develop PDRA Transmission System	271	344	79%	4	1	\$4,866	1	3	3	3	2	17
Spearman	Hansford	Canadian	Conservation	27	634	4%	1	3	\$615	4	5	5	5	5	28
			New Groundwater (Ogallala)	650	634	103%	5	3	\$601	4	3	3	3	2	23
			Develop PDRA Transmission System	116	634	18%	1	1	\$1,708	3	3	3	3	2	16
Irrigation	Hansford	Canadian	Conservation	37,260	0	N/A	5	3	\$17	5	5	5	3	5	31
Irrigation	Hartley	Canadian	Conservation	120,509	98,650	122%	5	3	\$17	5	5	5	3	5	31
Canadian	Hemphill	Canadian	Conservation	93	0	N/A	5	3	\$681	4	5	5	5	5	32
Stinnett	Hutchinson	Canadian	Conservation	38	216	17%	1	3	\$827	4	5	5	5	5	28
			New Groundwater (Ogallala)	225	216	104%	5	3	\$477	5	3	4	3	2	25
			Develop PDRA Transmission System	116	216	54%	3	1	\$6,407	1	3	3	3	2	16
TCW	Hutchinson	Canadian	Conservation	59	569	10%	1	3	\$570	4	5	5	5	5	28
			New Groundwater (Ogallala)	575	569	101%	5	3	\$736	4	3	4	3	2	24
Manufacturing	Hutchinson	Canadian	Purchase from Borger	4,416	4,416	100%	4	5	N/A	1	4	3	3	3	23
Irrigation	Hutchinson	Canadian	Conservation	10,281	0	N/A	5	3	\$17	5	5	5	3	5	31
Booker	Lipscomb	Canadian	Conservation	21	520	4%	1	3	\$597	4	5	5	5	5	28
			New Groundwater (Ogallala)	550	520	106%	5	5	\$316	5	3	4	3	2	27
Manufacturing	Lipscomb	Canadian	Purchase from Booker	124	124	100%	4	5	N/A	1	4	4	3	3	24
Dumas	Moore	Canadian	Conservation	231	4,437	5%	1	3	\$629	4	5	5	5	5	28
			New Groundwater (Ogallala)	4,500	4,437	101%	5	2	\$332	5	3	2	2	2	21
			Develop PDRA Transmission System	1,356	4,437	31%	2	1	\$3,620	1	3	3	3	2	15

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Strategy Evaluation Matrix

Entity	County Used	Basin Used	Strategy	Quantity (Ac-Ft/Yr)	Maximum Need	Percentage of Max Need Met	Quantity Score	Reliability	Annual Cost (\$/Ac-Ft)	Cost Score	Impacts of Strategy on:				Overall Score (5-40)
											Environmental Factors	Agricultural Resources/Rural Areas	Other Natural Resources	Key Water Quality Parameters	
Sunray	Moore	Canadian	Conservation	63	847	7%	1	3	\$886	4	5	5	5	5	28
			New Groundwater (Ogallala)	850	847	100%	5	2	\$474	5	3	4	3	2	24
			Develop PDRA Transmission System	271	847	32%	2	1	\$3,712	1	3	3	3	2	15
County-Other	Moore	Canadian	Conservation	23	30	77%	4	3	\$786	4	5	5	5	5	31
			New Groundwater (Ogallala)	100	30	333%	5	3	\$460	5	3	4	3	2	25
Manufacturing	Moore	Canadian	Purchase from Cactus	7,746	7,746	100%	4	5	N/A	1	4	2	3	3	22
Irrigation	Moore	Canadian	Conservation	55,406	6,171	898%	5	3	\$17	5	5	5	3	5	31
Perryton	Ochiltree	Canadian	Conservation	119	2,786	4%	1	3	\$370	5	5	5	5	5	29
			New Groundwater (Ogallala)	2,800	2,786	100%	5	5	\$425	5	3	4	3	2	27
County-Other	Potter	Red	Conservation	265	2,548	10%	1	3	\$552	4	5	5	5	5	28
			New Groundwater (Ogallala)	576	2,548	23%	1	2	\$488	5	3	4	3	2	20
County-Other	Potter	Canadian	Conservation	149	2,548	6%	1	3	\$311	5	5	5	5	5	29
			New Groundwater (Ogallala)	324	2,548	13%	1	2	\$488	5	3	4	3	2	20
County-Other	Potter	Canadian	New Groundwater (Dockum)	700	2,548	27%	2	2	\$527	4	3	4	3	2	20
Manufacturing	Potter	Canadian	Direct Reuse from Amarillo	5,700	9,633	59%	3	4	\$1,312	3	3	3	3	4	23
			Purchase from Amarillo	4,000	9,633	42%	2	5	N/A	1	4	2	3	3	20
Canyon	Randall	Red	Conservation	203	4,313	5%	1	3	\$647	4	5	5	5	5	28
			New Groundwater (Ogallala, Dockum)	4,300	4,313	100%	4	3	\$425	5	3	4	3	2	24
Lake Tanglewood	Randall	Red	Conservation	25	284	9%	1	3	\$636	4	5	5	5	5	28
			New Groundwater (Ogallala)	300	284	105%	5	3	\$1,035	3	3	4	3	2	23
County-Other	Randall	Red	Conservation	413	2,638	16%	1	3	\$495	5	5	5	5	5	29
			New Groundwater (Ogallala)	2,800	2,638	106%	5	3	\$248	5	3	3	3	2	24
Manufacturing	Randall	Red	New Groundwater (Ogallala)	620	619	100%	5	3	\$294	5	3	3	3	2	24
Wheeler	Wheeler	Red	Conservation	18	453	4%	1	3	\$618	4	5	5	5	5	28
			New Groundwater (Ogallala)	500	453	110%	5	5	\$625	4	3	4	3	2	26
Wholesale Water Providers:															
Amarillo	Potter and Randall	Red and Canadian	Conservation	2,762	55,926	5%	1	3	\$254	5	5	5	5	5	29
			Purchase from CRMWA	33,271	55,926	59%	3	5	N/A	1	4	3	3	2	21
			Potter Co. Well Field	6,000	55,926	11%	1	3	\$941	4	3	3	3	2	19
			Carson Co. Well Field	11,200	55,926	20%	1	3	\$441	5	3	3	3	2	20
			Roberts Co. Well Field	11,200	55,926	20%	1	5	\$1,538	3	3	3	3	2	20
Reuse	6,100	55,926	11%	1	5	\$1,368	3	3	3	3	4	22			
Borger	Hutchinson	Canadian	Conservation	107	6,438	2%	1	3	\$416	5	5	5	5	5	29
			Purchase from CRMWA	4,700	6,438	73%	3	5	N/A	1	4	3	3	2	21
			New Groundwater (Ogallala)	6,000	6,438	93%	4	5	\$521	4	3	3	3	2	24
Cactus	Moore	Canadian	Conservation	55	5,465	1%	1	3	\$487	5	5	5	5	5	29
			New Groundwater (Ogallala)	5,500	5,465	101%	5	1	\$422	5	3	2	3	2	21
			Develop PDRA Transmission System	1,744	5,465	32%	2	1	\$4,057	1	3	3	3	2	15
CRMWA			Replacement Wells	28,000	80,936	35%	2	5	\$356	5	3	3	3	2	23
			Roberts Co. Well Field	48,000	80,936	59%	3	5	\$676	4	3	3	3	2	23
			Conjunctive Use with Lake Meredith	10,000	80,936	12%	1	3	N/A	1	5	3	3	5	21
			Brush Control	0	80,936	0%	1	1	N/A	1	4	3	3	5	18
Palo Duro River Authority			Develop PDRA Transmission System	3,875	7,791	50%	2	1	\$3,810	1	3	3	3	2	15
Greenbelt MIWA			Donley Co. Well Field	2,000	0	N/A	5	3	\$629	4	3	3	3	2	23

Entity	County	Basin	Strategy	Environmental Factors															Comments
				Acres Impacted	Wetland Acres	Acres Impacted Score	Envir Water Needs	Envir Water Needs Score	Habitat	Habitat Score	Threat and Endanger Species	Threat and Endanger Species Score	Cultural Resources	Cultural Resources Score	Bays & Estuaries	Bays & Estuaries Score	Envir Water Quality	Overall Environmental Impacts	
Claude	Armstrong	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	5
			New Groundwater (Ogallala)	8	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
Panhandle	Carson	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	2	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
Wellington	Collingsworth	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Seymour)	14	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
			Expanded Use (RO Treatment)	5	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
Dalhart	Dallam	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	3	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
Texline	Dallam	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	1	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
Irrigation	Dallam	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
McLean	Gray	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	1	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
Pampa	Gray	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	11	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
			Purchase from CRMWA	0	N/A	5	None	4	Low	3	N/A	5	N/A	5	N/A	5	2	4	
Memphis	Hall	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	2	N/A	4	Low	3	Low	3	9	4	Low	3	N/A	5	2	3	
County-Other	Hall	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater- Brice-Lesly (Ogallala)	1	N/A	4	Low	3	Low	3	9	4	Low	3	N/A	5	2	3	
			New Groundwater-Estelline (Seymour)	1	N/A	4	Low	3	Low	3	9	4	Low	3	N/A	5	2	3	
			Expanded Use-Lakeview (RO Treatment)	5	N/A	4	Low	3	Low	3	9	4	Low	3	N/A	5	2	3	
Gruver	Hansford	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	2	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
			Develop PDRA Transmission System	48	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
Spearman	Hansford	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	2	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
			Develop PDRA Transmission System	23	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
Irrigation	Hansford	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5		
Irrigation	Hartley	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5		
Canadian	Hemphill	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5		
Stinnett	Hutchinson	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	1	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
			Develop PDRA Transmission System	122	N/A	2	Low	3	Medium	2	11	3	Low	3	N/A	5	2	3	
TCW	Hutchinson	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	2	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
Manufacturing	Hutchinson	Canadian	Purchase from Borger	0	N/A	5	None	4	Low	3	N/A	5	N/A	5	N/A	5	3	4	
Irrigation	Hutchinson	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
Booker	Lipscomb	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	2	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	

Entity	County	Basin	Strategy	Environmental Factors															Comments
				Acres Impacted	Wetland Acres	Acres Impacted Score	Envir Water Needs	Envir Water Needs Score	Habitat	Habitat Score	Threat and Endanger Species	Threat and Endanger Species Score	Cultural Resources	Cultural Resources Score	Bays & Estuaries	Bays & Estuaries Score	Envir Water Quality	Overall Environmental Impacts	
Manufacturing	Lipscomb	Canadian	Purchase from Booker	0	N/A	5	None	4	Low	3	N/A	5	N/A	5	N/A	5	3	4	
Dumas	Moore	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	9	N/A	4	Low	3	Low	3	N/A	12	3	Low	3	N/A	5	2	3
			Develop PDRA Transmission System	140	N/A	2	Low	3	Medium	2	12	3	Low	3	N/A	5	2	3	
Sunray	Moore	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	3	N/A	4	Low	3	Low	3	12	3	Low	3	N/A	5	2	3	
			Develop PDRA Transmission System	150	N/A	2	Low	3	Medium	2	12	3	Low	3	N/A	5	2	3	
County-Other	Moore	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	1	N/A	4	Low	3	Low	3	12	3	Low	3	N/A	5	2	3	
Manufacturing	Moore	Canadian	Purchase from Cactus	0	N/A	5	None	4	Low	3	N/A	5	N/A	5	N/A	5	3	4	
Irrigation	Moore	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
Perryton	Ochiltree	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	8	N/A	4	Low	3	Low	3	10	4	Low	3	N/A	5	2	3	
County-Other	Potter	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	15	N/A	4	Low	3	Low	3	12	3	Low	3	N/A	5	2	3	
County-Other	Potter	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	15	N/A	4	Low	3	Low	3	12	3	Low	3	N/A	5	2	3	
County-Other	Potter	Canadian	New Groundwater (Dockum)	12	N/A	4	Low	3	Low	3	12	3	Low	3	N/A	5	2	3	
Manufacturing	Potter	Canadian	Direct Reuse from Amarillo	206	N/A	2	Low	3	Medium	2	12	3	Low	3	N/A	5	4	3	
			Purchase from Amarillo	0	N/A	5	Medium	2	Low	3	N/A	5	N/A	5	N/A	5	3	4	
Canyon	Randall	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala, Dockum)	9	N/A	4	Low	3	Low	3	13	3	Low	3	N/A	5	2	3	
Lake Tanglewood	Randall	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	9	N/A	4	Low	3	Low	3	13	3	Low	3	N/A	5	2	3	
County-Other	Randall	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	8	N/A	4	Low	3	Low	3	13	3	Low	3	N/A	5	2	3	
Manufacturing	Randall	Red	New Groundwater (Ogallala)	4	N/A	4	Low	3	Low	3	13	3	Low	3	N/A	5	2	3	
Wheeler	Wheeler	Red	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	7	N/A	4	Low	3	Low	3	9	4	Low	3	N/A	5	2	3	
Wholesale Water Providers:																			
Amarillo	Potter and Randall	Red and Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			Purchase from CRMWA	0	N/A	5	None	4	Low	3	N/A	5	N/A	5	N/A	5	2	4	
			Potter Co. Well Field	285	N/A	2	Low	3	Medium	2	Varies	3	Low	3	N/A	5	2	3	
			Carson Co. Well Field	71	N/A	3	Low	3	Low	3	Varies	3	Low	3	N/A	5	2	3	
			Roberts Co. Well Field	502	N/A	1	Low	3	Medium	2	Varies	3	Low	3	N/A	5	2	3	
			Reuse	175	N/A	2	Medium	2	Medium	2	Varies	3	Low	3	N/A	5	4	3	
Borger	Hutchinson	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			Purchase from CRMWA	0	N/A	5	None	4	Low	3	N/A	5	N/A	5	N/A	5	2	4	
			New Groundwater (Ogallala)	37	N/A	4	Low	3	Low	3	11	3	Low	3	N/A	5	2	3	
Cactus	Moore	Canadian	Conservation	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			New Groundwater (Ogallala)	15	N/A	4	Low	3	Low	3	12	3	Low	3	N/A	5	2	3	
			Develop PDRA Transmission System	171	N/A	2	Low	3	Medium	2	12	3	Low	3	N/A	5	2	3	
CRMWA			Replacement Wells	15	N/A	4	Low	3	Low	3	Varies	3	Low	3	N/A	5	2	3	
			Roberts Co. Well Field	433	N/A	2	Low	3	Medium	2	Varies	3	Low	3	N/A	5	2	3	
			Conjunctive Use with Lake Meredith	0	N/A	5	Positive	5	Low	3	N/A	5	N/A	5	N/A	5	5	5	
			Brush Control	1,421	N/A	1	Positive	5	Medium	2	N/A	5	Low	3	N/A	5	5	4	
Palo Duro River Authority			Develop PDRA Transmission System	249	N/A	2	Low	3	Medium	2	Varies	3	Low	3	N/A	5	2	3	
Greenbelt MIWA			Donley Co. Well Field	94	N/A	3	Low	3	Low	3	Varies	3	Low	3	N/A	5	2	3	