

Groundwater Management Area (GMA) 1
Modeled Available Groundwater for Relevant Aquifers by County
2021 Joint Planning

Aquifer	County	Regional Water Planning Area	River Basin	Modeled Available Groundwater (acre-feet per year)					
				2030	2040	2050	2060	2070	2080
Dockum	Armstrong	A	Red	7,937	8,343	8,822	9,070	9,125	9,135
Dockum	Carson	A	Canadian	0	0	0	0	0	0
Dockum	Carson	A	Red	6	6	6	6	6	6
Dockum	Dallam	A	Canadian	15,522	14,700	14,019	13,513	12,895	12,415
Dockum	Hartley	A	Canadian	64,591	64,147	60,766	56,662	52,208	48,142
Dockum	Moore	A	Canadian	5,959	6,003	5,680	5,425	5,119	4,838
Dockum	Oldham	A	Canadian	153,694	145,814	135,269	124,727	114,427	105,188
Dockum	Oldham	A	Red	93	111	124	134	142	153
Dockum	Potter	A	Canadian	38,004	38,158	37,268	36,186	34,990	33,815
Dockum	Potter	A	Red	2,352	2,101	2,010	1,976	1,943	1,928
Dockum	Randall	A	Red	37,967	41,760	39,930	36,248	28,759	25,176
Dockum	Sherman	A	Canadian	416	310	288	293	288	291
Ogallala	Armstrong	A	Red	56,439	48,764	42,118	36,270	31,653	27,923
Ogallala	Carson	A	Canadian	68,193	66,220	62,132	57,975	54,708	49,565
Ogallala	Carson	A	Red	97,831	93,536	87,636	83,276	79,657	72,209
Ogallala	Donley	A	Red	78,267	77,157	72,601	67,032	60,915	53,337
Ogallala	Gray	A	Canadian	46,240	43,480	39,643	36,480	33,394	30,628
Ogallala	Gray	A	Red	135,408	130,122	120,739	110,565	100,408	91,308
Ogallala	Hansford	A	Canadian	295,700	281,612	264,290	247,744	229,800	211,464
Ogallala	Hemphill	A	Canadian	24,975	29,168	32,388	34,729	36,110	37,074
Ogallala	Hemphill	A	Red	20,841	23,040	23,233	23,310	23,147	23,103

Values from [GAM Run 21-007 MAG: Modeled Available Groundwater for the High Plains Aquifer System in Groundwater Management Area 1.](#)

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				2030	2040	2050	2060	2070	2080
Ogallala	Hutchinson	A	Canadian	123,745	118,005	110,304	103,014	96,847	90,893
Ogallala	Lipscomb	A	Canadian	270,819	263,478	249,968	235,561	218,975	201,984
Ogallala	Moore	A	Canadian	149,426	142,152	129,861	113,256	94,363	78,645
Ogallala	Ochiltree	A	Canadian	259,973	247,274	231,502	215,617	199,324	181,295
Ogallala	Oldham	A	Canadian	34,871	32,845	28,578	23,948	19,789	16,869
Ogallala	Oldham	A	Red	4,196	3,347	2,641	2,096	1,604	1,172
Ogallala	Potter	A	Canadian	14,672	13,137	11,036	9,214	7,648	6,337
Ogallala	Potter	A	Red	10,111	8,815	7,490	6,027	4,417	3,286
Ogallala	Randall	A	Red	70,551	60,509	50,310	41,377	34,191	28,047
Ogallala	Roberts	A	Canadian	386,950	372,064	346,908	322,461	297,068	267,425
Ogallala	Roberts	A	Red	22,350	22,866	22,427	21,648	20,461	19,169
Ogallala	Sherman	A	Canadian	287,657	261,521	226,142	198,338	166,675	145,399
Ogallala	Wheeler	A	Red	132,615	132,787	128,472	121,852	114,269	106,929
Ogallala*	Dallam	A	Canadian	269,575	228,726	194,888	165,787	144,360	128,259
Ogallala*	Hartley	A	Canadian	286,610	223,388	184,199	157,553	136,012	118,786
Dockum Aquifer				326,541	321,453	304,182	284,240	259,902	241,087
Ogallala Aquifer				3,148,015	2,924,013	2,669,506	2,435,130	2,205,795	1,991,106
GMA 1 Total for All Aquifers				3,474,556	3,245,466	2,973,688	2,719,370	2,465,697	2,232,193

* The Ogallala Aquifer in Dallam and Hartley counties also include the Rita Blanca Aquifer where they are both spatially coincident.