



Panhandle Groundwater Conservation District

Monthly Operations Report

August 2024 Operations Report

The month of August contained 12 seeding missions over 9 days.

Date	Flares	Counties seeded
1	17 + 3H	Roberts
3	24 + 2H	Gray, Roberts, Hutchinson
10	32 + 3H	Carson, Gray
11	59 + 3H	Armstrong, Donley
14	48	Armstrong, Carson, Potter
15	26	Armstrong, Donley
16	34 + 3H	Carson, Donley, Gray, Wheeler
25	6	Carson
29	8 + 1H	Carson, Donley
TOTAL	254 + 15H	

August started just like how July ended with seeding being conducted on the 1st and 3rd of the month as a cold front and shortwave trough moved through. Temperatures remained very hot during the first week with readings ranging from the upper 90s to 107°F in Amarillo. By the 8th, another cold front approached, dropping temperatures back to normal. This also brought in more unsettled conditions with seeding flights on the 10th and 11th. Additional fronts and troughs migrated into the district through the 16th with three consecutive days of seeding operations from the 14th-16th. A potent upper-level ridge then moved overhead, promoting stable and hot conditions with temperatures soaring into the 100s for 10 straight days. By the 25th, the ridge started to move towards the Midwest in response to an upper-level trough. This allowed for weak convection to form over the district with seeding occurring over Carson County. The last seeding mission of the month came on the 29th as a cold front descending into the Panhandle. The month ended quiet with high temperatures in the 80s.

For the month, 254 glaciogenic flares and 15 hygroscopic flares were used during 26.89 flight hours. Year-to-date, 671 glaciogenic flares, and 43 hygroscopic flares have been used. So far, 56 total flights covering 89.70 hours have been conducted.

Precipitation totals this month were below average for much of the district. Totals at three reporting stations were 2.02 in. (Amarillo), 2.36 in. (Pampa), and 0.95 in. (Clarendon). Year-to-date, most stations are near normal. Temperatures this month were well above average with average high temperatures of +8.3°F in Amarillo. The highest temperature ever recorded in the month of August was seen on the 22nd at 108°F. Additionally, 10 consecutive days of 100°F+ (breaking a record) were observed with a total of 17 100°F+ days.

Looking ahead, September appears to have near normal precipitation and above average temperatures. Climate models and the Climate Prediction Center continue to suggest below average rainfall and above normal temperatures through November.



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Monthly rain gauge measurements from nearest locations inside and out of the target area recorded either by the National Weather Service, Texas Tech University, Mesowest as well as CoCoRaHS.

August 2024 (Normals of 2.86" from Amarillo to 3.09" in Pampa)

Potter County		Wheeler County		Donley County	
Amarillo 15 NNW	1.75	Wheeler 13.3 SSE	2.27	Clarendon 2WSW	0.95
Amarillo (NWS)	2.02	Armstrong County			
Amarillo 9 NNE	1.97	Claude 12SW	0.90		
Carson County		Goodnight	2.59	Out of Target Area	
Panhandle 1 SSW	2.28	Palo Duro Floor	2.64	Borger 7E (Hutchinson)	1.64
Pantex	2.65	AREA AVERAGE 1.96		Fritch 1 WNW (Moore)	3.22
Gray County				Umberger 3 NNE (Randall)	2.63
Pampa 2E	2.36			Vega 4E (Oldham)	1.62
Lake McClellan 2NW	1.98			Tulia 2 ENE (Swisher)	0.99
Mclean 1E	1.98				

Year to Date (Normals of 14.22" from Amarillo to 16.71" in Pampa)

Potter County		Wheeler County		Donley County	
Amarillo 15 NNW	9.90	Wheeler 13.3 SSE	14.59	Clarendon 2WSW	13.84
Amarillo (NWS)	14.27	Armstrong County			
Amarillo 9 NNE	14.35	Claude 12SW	12.59		
Carson County		Goodnight	14.46	Out of Target Area	
Panhandle 1SSW	13.53	Palo Duro Floor	18.10	Borger 7E (Hutchinson)	10.48
Pantex 1 ESE	14.80	AREA AVERAGE 14.14		Fritch 1 WNW (Moore)	12.13
Gray County				Umberger 3 NNE (Randall)	14.25
Pampa 2E	12.88			Vega 4E (Oldham)	12.89
Lake McClellan 2NW	15.32			Tulia 2 ENE (Swisher)	12.65
Mclean 1E	14.86				