Panhandle Groundwater Conservation District

Monthly Operations Report

July 2024 Operations Report

The month of July contained 8 seeding missions over 7 days.

Date	Flares	Counties seeded			
2	26 + 3H	Armstrong, Donley, Wheeler			
6	34 + 3H	Armstrong, Potter			
11	37	Armstrong, Carson, Potter			
16	20 + 2H	Armstrong, Carson, Gray			
22	20 + 1H	Armstrong, Carson, Gray, Roberts			
27	8	Armstrong			
31	29 + 1H	Carson, Hutchinson			
TOTAL	174 + 10H				

The active pattern seen in June continued into the first week of July with seeding missions on the 2nd and 6th as a couple of fronts progressed through. The last of the series of fronts then moved south of the district by the 7th, leaving the project area dry for the next several days. The next mission took place on the 11th as a shortwave trough impacted the region. This brought widespread activity with seven clouds being seeded. Another stretch of dry weather occurred before a more active pattern returned from the 16th-23rd. During this period, four flights were flown (two recon and two seeding) with seeding on the 16th and 22nd. There were also two days where alert status was given to the pilots, but activity weakened before takeoff. High pressure then promoted tranquil conditions with the end of the month becoming active once again. Two additional seeding flight were conducted on the 27th and 31st.

For the month, 174 glaciogenic flares and 10 hygroscopic flares were used during 20.20 flight hours. Year-to-date, 417 glaciogenic flares and 28 hygroscopic flares have been used. So far, 42 total flights covering 62.81 hours have been conducted.

Precipitation totals this month were below average for the far western and southwestern portions of the district. The rest of the project area was near to above average. Totals at three reporting stations were 1.30 in. (Amarillo), 2.65 in. (Pampa), and 2.53 in. (Clarendon). Year-to-date, most stations are near to slightly below normal. Temperatures this month were above average with average high temperatures of +2.7°F in Amarillo. Ten days of 100°F+ were seen with four of these days breaking record highs.

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

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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.

July 2024 (Normals of 2.82" from Amarillo to 2.50" in Pampa)

Potter County		Wheeler County		Donley County	
Amarillo 15 NNW	1.02	Wheeler 13.3 SSE	3.15	Clarendon 2WSW	2.53
Amarillo (NWS) 1.30		Armstrong County			
Amarillo 9 NNE	3.51	Claude 12SW	1.01		
Carson County	•	Goodnight	1.28	Out of Target Area	
Panhandle 1 SSW	2.68	Palo Duro Floor	2.23	Borger 7E	2.33
				(Hutchinson)	
Pantex 3.48				Fritch 1 WNW	2.34
Gray County				(Moore)	
Pampa 2E	2.65	AREA AVERAGE		Umbarger 3 NNE	2.21
				(Randall)	
Lake McClellan 2NW 5.15		2.59		Vega 4E (Oldham)	2.54
Mclean 1E	2.25			Tulia 2 ENE	0.25
				(Swisher)	

Year to Date (Normals of 11.36" from Amarillo to 13.62" in Pampa)

<u>rear to Date (Normals of 11.50) from Amartito to 15.02 th 1 ampa)</u>										
Potter County		Wheeler County		Donley County						
Amarillo 15 NNW	8.15	Wheeler 13.3 SSE	12.32	Clarendon 2WSW	10.36					
Amarillo (NWS) 12.25		Armstrong County								
Amarillo 9 NNE	12.38	Claude 12SW	11.69							
Carson County	,	Goodnight	11.87	Out of Target Area						
Panhandle 1SSW	11.25	Palo Duro Floor	15.16	Borger 7E	8.44					
				(Hutchinson)						
Pantex 1 ESE 11.32				Fritch 1 WNW	8.91					
Gray County				(Moore)						
Pampa 2E 10.5		AREA AVERAGE		Umbarger 3 NNE	11.62					
•				(Randall)						
Lake McClellan 2NW 13.34		11.67		Vega 4E (Oldham)	11.27					
Mclean 1E	12.87			Tulia 2 ENE	11.66					
				(Swisher)						