### WESTERN KANSAS WEATHER MODIFICATION PROGRAM

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## WEEKLY NEWSLETTER

### No. 2012-19

#### For the period August 11 – August 17, 2012

**General Interest:** The latest Drought Monitor (DM) indicates that 63% of Kansas now resides in exceptional drought, the highest level of drought as measured by the DM. By this time last year, only 15% of the state was listed as being in exceptional drought. One drought indicator that serves as input into the Drought Monitor map is the Palmer Drought Severity Index (PDSI). According to the PDSI, southwest Kansas needs 6 to 9 inches of precipitation today to break the drought while 9 to 12 inches is needed today to break the drought over west-central Kansas. Overall, the state needs over 15 inches to bring the entire state back to normal conditions. Of course, should we receive a full 6 to 12 inches all in one day, this scenario would do little to actually alleviate the drought as flooding and massive runoff would likely result without significant soil saturation across the area. The optimal scenario would be for steady rains totaling 6 to 12 inches drawn out over a period lasting roughly one month or two months. What is more likely to occur however when considering the yearly trend and latest long-term forecasts, is no significant impact in the drought. The latest Drought Outlook continues to indicate persistence in drought conditions through November at the earliest.

Source: US Drought Monitor

**Weather:** The week started out with a few storms across the area Saturday. A trough passed through on Monday. A line of weak storms also passed through during the evening hours Monday. Tranquil conditions prevailed Tuesday with mostly sunny skies and temperatures in the 80's. On Wednesday, a few weak storms occurred across northwestern Kansas and portions of west-central Kansas ahead of a strong cold front traveling south. Calm conditions returned for the remainder of the week with seasonable temperatures.

**Operations:** There was one operational day this week. Seeding for rain optimization occurred that day.

# August 15<sup>th</sup>, Program Operations Day #14

One plane was launched at 5:42 p.m. to investigate weak storm activity along and slightly behind a southeast moving gust front over Greeley and extreme northwestern Wichita counties. Radar indicated these storms were capable of light to moderate rainfall during the time they were close to the gust front before fading away after the gust front became separated from the cloud. Seeding for rain optimization began at 6:59 and ended at 7:01 over northwestern Wichita County within an area of light updrafts between two moderate intensity rain cores. The plane patrolled for a short period before returning at 7:24.

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### Walter Geiger, Meteorologist Western Kansas Weather Modification Program