

## WESTERN KANSAS WEATHER MODIFICATION PROGRAM

P.O. BOX 254 Lakin, KS 67860

Lakin Office: 620-355-6913

waltergeiger@yahoo.com

Internet: [www.gmd1.org/index-3.html](http://www.gmd1.org/index-3.html)

### WEEKLY NEWSLETTER

No. 2014-20

For the period August 23 – August 29, 2014

**General Interest:** The Drought Outlook for September indicates the continuation of drought easing over all of Kansas with the possibility of a substantial portion, central and eastern Kansas, pulling out of the drought entirely by the end of the month. Locally, the drought is expected to diminish but still remain at some weaker level by September 30<sup>th</sup> for all Kansas counties west of a line from Rawlins County, including Atwood, south to Seward County. Unfortunately, this includes the target area counties of Kearny and Scott. However, Lane County will likely drop out of drought status by the end of the month along with Gove and Finney counties. The temperature forecast shows an equal chance of being below, near normal, or above normal for September while the precipitation forecast indicates a 40% chance of being above normal for all of western Kansas. These forecasts are certainly encouraging news for the prospects of a fairly wet fall and perhaps even longer-term, a relatively wet winter!

Source: NWS Climate Prediction Center

**Weather:** The week started out hot and sunny for most of western Kansas while a few small storms were noted in Colorado and central Kansas on Sunday. A weak cold front moved into west-central and southwest Kansas Monday. The cold front, combined with ample mid-level moisture and instability, allowed for widespread storms to form by early evening over portions of western Kansas. While some storms posed a small hail threat, the slow movement of these storms led to substantial precipitation accumulation in localized areas. A few storms occurred over and near the Oklahoma border Tuesday afternoon followed by a larger complex of storms rolling out of Colorado during the late evening and overnight hours. The nighttime storms were slow moving with a few locations over extreme western Kansas experiencing localized flooding. On Wednesday, an upper level disturbance along with a cold front pushed through the area resulting in widespread storm development. Torrential rainfall due to slow movement was the primary outcome along with a few brief instances of small hail. With the primary upper level disturbance nearing western Kansas Thursday afternoon, another round of showers and storms rolled through portions of the area again Thursday evening and early night with the main condition being torrential but localized rainfall. For the entire week, the most frequent and heaviest accumulation occurred over northwest and sections of west-central Kansas while southwest Kansas storms were spotty in nature resulting in much less accumulation.

**Operations:** There were two operational days this week. Also, observation flights were conducted on August 27<sup>th</sup> and August 28<sup>th</sup>.

#### August 25th, Program Operations Day #19

One plane was launched at 4:10 to investigate a few small storms possibly generated by a gust front over central Kearny County traveling slowly northeast. Seeding for hail suppression began at 4:45 on the central Kearny storm. A second plane was launched to Lane at 4:53. Seeding continued over central and northern Kearny through 5:00. Hail suppression began at 5:22 near Dighton. Seeding over Kearny was cancelled at 5:42. The plane in Kearny then headed to Lane. Meanwhile, periods of off and on seeding continued over Lane County through 6:00 where several gust fronts continued to interact with old storms and develop new storms. A new area of seeding began at 6:43 over extreme southeastern Lane. All seeding stopped at 7:05 over Lane County as the storms lost hail intensities. The planes patrolled the area until turning for base at 7:29.

August 28<sup>th</sup>, Program Operations Day #20

One plane was launched at 5:25 to investigate a small storm over southwestern Scott for possible hail suppression. At 5:23, radar indicated the potential for in-cloud hail that may be large enough to pose a hail threat on the ground. Seeding for hail suppression began at 5:49 on the southwestern Scott County storm. The cloud fell below the hail threshold around 5:55. The plane patrolled the area for awhile before turning for base at around 6:30.

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