

## WESTERN KANSAS WEATHER MODIFICATION PROGRAM

P.O. BOX 254 Lakin, KS 67860  
Lakin Office: 620-355-6913  
[waltergeiger@yahoo.com](mailto:waltergeiger@yahoo.com)  
Internet: [www.gmd1.org/index-3.html](http://www.gmd1.org/index-3.html)

WEEKLY NEWSLETTER  
No. 2014-15  
For the period July 19 – July 25, 2014

General Interest: A water issue that sounds all too familiar to what we are beginning to experience here in western Kansas is also occurring within the Colorado River Basin. The results of a first-of-its-kind study were released last week highlighting the groundwater woes of the seven states of the Colorado River Basin. The Colorado River Basin serves about 40 million people, and irrigates about 4 million acres of cropland in Colorado, Arizona, Nevada, Utah, Wyoming, New Mexico and California. The University of California, Irvine, and NASA used data collected from a satellite that detects groundwater by measuring the gravitational pull through time of the increasing or decreasing water reserves. The results indicated that roughly 17.3 trillion gallons of water was lost through depletion between December 2004 and November 2013 within the Basin. The staggering loss represents about twice the volume of the largest freshwater reservoir in the United States, Lake Meade in Nevada, with 75 percent of the total loss being groundwater supplies. Just like the Ogallala Aquifer, including the High Plains Aquifer, the groundwater within the Colorado River Basin took thousands of years to accumulate and is being depleted through pumping at a much faster rate than it can be recharged. The situation is becoming even more disastrous as large reservoirs have either dried up fast or dropped to historically low levels such as the case at Lake Meade. Scientists expect the situation will only get worse as climate change models predict much of the west will likely experience hotter temperatures in time due to climate change. The study concluded that due to a decrease in snowpack, decrease in streamflows due to pumping, population growth and warmer temperatures, the long-term security of the region will be significantly threatened. The study will be published in the journal of Geophysical Research Letters soon.

Source: Yahoo News

Weather: The week started out hot with mostly sunny skies both Saturday and Sunday. A few storms formed Monday afternoon due to extreme heating. While most activity remained sub-severe, a few storms briefly became intense with the main threat being high winds. Limited occurrence of hail was the secondary threat. Significant rain fell over northeastern Wichita County and eastern Hamilton due to the initially slow movement of storms there. Hot but tranquil conditions prevailed through Thursday. On Friday, strong to severe storms were located over Hamilton and portions of west-central Kansas while a few locations within the target area received light to spotty moderate rain overnight Friday.

Operations: There was one operational day this week. Seeding for hail suppression occurred that day.

July 21st, Program Operations Day #13

One plane was launched at 5:40 p.m. to investigate nearly stationary storms over extreme northeastern Wichita County. The plane patrolled the storm for a brief time over northeastern Wichita as the cloud remained stationary. However, a slow movement to the southeast towards Scott County began at 6:05 at which time seeding for hail suppression commenced. The aircraft periodically seeded the storm as needed while it moved through western and southern Scott. Seeding was terminated at 7:20 over extreme southern Scott County. The storm merged with other storms across the area to form a long squall line over southwestern Kansas for a few more hours before fading away.

Walter Geiger, Meteorologist  
Western Kansas Weather Modification Program