WESTERN KANSAS WEATHER MODIFICATION PROGRAM

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WEEKLY NEWSLETTER

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For the period May 23 – May 29, 2015

General Interest: County rainfall averages for May

County precipitation averages for May indicate a widespread and very substantial moisture surplus for all target area counties. While most areas struggled to reach only 0.50 inches total for May last year, western Kansas accumulated enough moisture this May to nearly wipe out the drought! My opinion at the moment is that should the first half of June continue with widespread significant rainfall, the drought will be completely finished in western Kansas by June 15th. Right now, the forecast calls for only 0.25 to around 0.75 inches for the period June 1 to June 7. Currently, all target area counties are reporting normal to above normal year-to-date precipitation. Rain reports from the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS), www.cocorahs.org, indicate the highest 2015 May county precipitation average was in Scott County with 10.36 inches or 244% above normal for Scott. This accumulation equates to slightly more than half of the Scott County annual precipitation! The average for Lane County was 7.69 inches or 130% above normal for Lane. Kearny County received 6.91 inches or 130% above normal also.

<u>Weather:</u> The week started out cloudy with a round of widespread rains and some severe weather on Sunday. A cool front passed through Monday with some storms firing on the front during the late evening hours over mainly Finney County and points east. Heating of the day allowed for storms again Tuesday across portions of western Kansas. By Wednesday, strong heating combined with several surface boundaries and an upper level disturbance resulted in intense storm development during the late afternoon and evening. Several supercell storms were noted across the area with very large hail and tornadoes reported. Localized flooding also occurred under these severe storms. Another round of severe weather occurred again Thursday due to daytime heating and an upper level disturbance with the main threat being flooding rains and large hail. Light to moderate showers occurred Friday over potions of western Kansas while the severe weather was confined to Oklahoma and Texas.

Operations: There were two seeding days this week. Two days of observation occurred on the 7th and 8th.

May 24th, Program Operations Day #8

Two planes were launched at 7:28 p.m. to intercept a line of strong to severe storms traveling east-northeast through western Hamilton and Stanton counties. Radar and ground reports indicated large hail occurring with this line while it was just west of the Kansas/Colorado border. Hail suppression seeding began at 8:03 over central and northern Hamilton County. Seeding was terminated at 8:20 over extreme southeastern Hamilton as the storm line entered the target area and transitioned to a moderate wind and heavy rain event.

May 27th, Program Operations Day #9

Two planes were launched at 2:10 p.m. to investigate the first developing storm of the day over extreme southern Lane County. Hail suppression seeding began at 2:40 over southern and western Lane. Also, seeding for hail suppression began at 2:50 near friend. By 3:00, radar indicated four severe storms producing hail over Lane and

southern Scott, the strongest storm was located over southern Lane with up to 2.00+ inch hail. Intense seeding for hail suppression continued through 3: 35 southwest of Dighton on an extremely strong supercell storm producing very large hail. By 4:23, radar indicated two supercell storms in close proximity to each other with one just south of Dighton while the other was just south of Grigston. Intense seeding was initiated on the Grigston storm at 4:23. The plane previously working the southern Lane storm had to return to base to reload seeding agent. All seeding remained confined to the second supercell which at 4:51 was located south of Dighton over an area that was previously impacted by the first supercell. Seeding stopped at 5:10 over southern Lane as the storm was moving southeast into Finney. Seeding for hail suppression began at 5:40 near Scott City. Seeding continued over Scott County through 6:00. Seeding began over southern Wichita County at 6:04. Off and on seeding continued over southeastern Wichita and southern Scott counties through 7:10. Seeding was terminated at 7:20 over southern Scott as this storm had fallen below the hail threshold. The strong storms had transitioned into Finney County and points east. Planes turned for base at 7:30. Although supercells are not uncommon in western Kansas the number and close proximity of these supercells to each other is a bit rare.

May 28th, Program Operations Day #10

Two planes were launched at 3:35 p.m. to begin seeding yet another powerful supercell with large hail and periodic tornadoes over southern Wichita County heading east. Seeding for hail suppression began at 3:50. Later, seeding began over western Kearny at 4:30 as a squall line began to develop from the supercell in Wichita southwest into Stanton County. Seeding was terminated at 5:14 over both Scott and Kearny counties as the squall line began to transition into a heavy rain event. Seeding over Kearny resumed at 5:30 on a small storm within the line that had become reinvigorated to the point of producing hail of around 1.50 inches. Seeding also resumed over Dry Lake in southeastern Scott as a storm cell within the line intensified to hail production. Seeding continued through 6:00 over northern Kearny on a new line of storms oriented west to east. Seeding was terminated at 6:22 over northern Kearny. Planes turned for base at 6:26.

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