

U. S. DEPARTMENT OF AGRICULTURE  
WEATHER BUREAU

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# CLIMATOLOGICAL SERVICE

DISTRICT No. 9, COLORADO VALLEY

FREDERICK H. BRANDENBURG  
DISTRICT EDITOR

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## REPORT FOR JULY, 1913

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Prepared under direction of C. F. MARVIN, Chief U. S. Weather Bureau



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## CLIMATOLOGICAL DATA FOR JULY, 1913.

### DISTRICT NO. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

#### GENERAL SUMMARY.

The hot dry weather characteristic of early summer in the Colorado Basin prevailed during the first 5 or 6 days. The following week was marked by scattered thunder-showers, which caused some improvement in conditions, but high temperatures continued in the southern half of the district. Beginning on the 14th showers became general, and for 10 days they occurred over the greater part of the district. In localities in Arizona, western New Mexico, and eastern Utah the 24-hour falls exceeded an inch. While the precipitation for the entire month was about normal it exceeded the combined total for April, May, and June, which was only 1.37 inches. Sheep and range cattle industries and dry-farming interests suffered from the drought, and irrigation ditches which receive their supply from the smaller streams experienced a shortage of water. The Indian agencies in the plateau region of northeastern Arizona reported that the season thus far had been so deficient in precipitation as to endanger all crops on the reservations. More rain is needed to bring the ranges in different parts of the district into good condition.

#### TEMPERATURE.

The mean temperature for the stations reporting was  $72.4^{\circ}$ , or  $1.6^{\circ}$  below the normal. The mean for July, 1912, was  $70.9^{\circ}$ . The highest monthly mean was  $90.6^{\circ}$ , at Quartzite, Ariz., and the lowest  $46.5^{\circ}$ , at Corona, Colo. As a whole the first half of the month was warmer than the seasonal average, while the last half was consistently cooler than the average, with marked daily deficiencies in the southern half of the district. During this period freezing temperatures occurred at a number of high stations in the different areas. The lowest temperature,  $24^{\circ}$ , occurred at Dillon and Fraser, Colo., and Strawberry Tunnel (east), Utah, on the 12th. Temperatures of  $100^{\circ}$  or higher occurred in the different areas except western Wyoming. The highest temperature,  $121^{\circ}$ , occurred at Parker, Ariz., on the 15th.

Details of temperature are summarized in the following table:

Areas of States in District No. 9.	Temperature.					
	Mean.	Departure from normal.	Highest.	Station.	Lowest.	Station.
Western Wyoming.....	60.7	+0.7	95	At 2 stations.	30	At 2 stations.
Western Colorado.....	63.9	-1.6	104	Palisades.....	24	Do.
Eastern Utah.....	70.8	-1.5	111	St. George.....	24	Strawberry Tunnel (east).
Western New Mexico.....	72.2	-1.1	108	At 3 stations.	31	Berger's ranch.
Arizona.....	78.6	-2.0	121	Parker.....	28	Alpine.
Southeastern Nevada.....	79.4	+3.6	113	Logan.....	40	Caliente.

#### PRECIPITATION.

The average for the 202 stations reporting was 1.68 inches, or 0.04 inch below the normal. The average for July, 1912, was 2.65 inches. The first 5 days were practically without rain. From the 6th to the 10th scattered showers occurred in the different areas, except western Wyoming. The 14th marked the beginning of fairly well-distributed showers throughout the district. The last 3 days were showery in Arizona and western New Mexico, but in the rest of the district the period from the 25th to the end of the month did not add materially to the water supply. The greatest monthly amount was 4.75 inches at Chiarson's Mill and Fairbank, Ariz., and the least, a trace, at Caliente, Nev. Light snow fell at Grandlake, Colo., on the 11th, and on a number of dates at Corona, Colo. The average number of days with 0.01 inch or more precipitation was 6 in western Wyoming, 10 in western Colorado, 7 each in eastern Utah, western New Mexico, and Arizona, and 2 in southeastern Nevada. The average for the district as a whole was 7 days.

The average precipitation and departures from the normal on the different watersheds are given in the following table:

Watershed.													
Green.		Grand.		San Juan.		Little Colorado.		Gila.					
Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.				
1.56	+0.20	1.80	+0.04	1.50	+0.01	1.96	-0.13	1.99	-0.24	1.91	-0.20	1.25	+0.21

#### MISCELLANEOUS.

The average amount of sunshine, in percentages, with departures from the normal, was as follows: Grand Junction,  $77, \pm 0$ ; Durango,  $74, -3$ ; Phoenix,  $79, -5$ ; and Yuma,  $89, \pm 0$ .

The relative humidity reported was: Grand Junction,  $44, +9$ ; Durango,  $51, -6$ ; Phoenix,  $38, +2$ ; and Yuma,  $45, +1$  per cent.

#### RIVERS.

The volume discharged by the Colorado and tributaries was much below the normal, and the least in 3 years. The highest stages occurred at the beginning of the month after which there was a steady decline until the 17th. As a result of showers there was a moderate rise in the upper reaches until the 25th. The lowest stages occurred generally at the end of the month.















Total Precipitation, July, 1913.



Departure of the Mean Temperature from the Normal, July, 1913.

